10581412

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NEWS 3	NOV 26	MARPAT enhanced with FSORT command
NEWS 4	NOV 26	CHEMSAFE now available on STN Easy
NEWS 5	NOV 26	Two new SET commands increase convenience of STN searching
NEWS 6	DEC 01	ChemPort single article sales feature unavailable
NEWS 7	DEC 12	GBFULL now offers single source for full-text coverage of complete UK patent families
NEWS 8	DEC 17	Fifty-one pharmaceutical ingredients added to PS
NEWS 9	JAN 06	The retention policy for unread STNmail messages will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 10	JAN 07	WPIDS, WPINDEX, and WPIX enhanced Japanese Patent Classification Data
NEWS 11	FEB 02	Simultaneous left and right truncation (SLART) added for CERAB, COMPUAB, ELCOM, and SOLIDSTATE
NEWS 12	FEB 02	GENBANK enhanced with SET PLURALS and SET SPELLING
NEWS 13	FEB 06	Patent sequence location (PSL) data added to USGENE
NEWS 14	FEB 10	COMPENDEX reloaded and enhanced
NEWS 15	FEB 11	WTEXTILES reloaded and enhanced
NEWS 16	FEB 19	New patent-examiner citations in 300,000 CA/CAplus patent records provide insights into related prior art
NEWS 17	FEB 19	Increase the precision of your patent queries -- use terms from the IPC Thesaurus, Version 2009.01
NEWS 18	FEB 23	Several formats for image display and print options discontinued in USPATFULL and USPAT2
NEWS 19	FEB 23	MEDLINE now offers more precise author group fields and 2009 MeSH terms
NEWS 20	FEB 23	TOXCENTER updates mirror those of MEDLINE - more precise author group fields and 2009 MeSH terms
NEWS 21	FEB 23	Three million new patent records blast AEROSPACE into STN patent clusters
NEWS 22	FEB 25	USGENE enhanced with patent family and legal status display data from INPADOCDB
NEWS 23	MAR 06	INPADOCDB and INPAFAMDB enhanced with new display formats
NEWS 24	MAR 11	EPFULL backfile enhanced with additional full-text applications and grants

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 NEWS 25  MAR 11  ESBIOBASE reloaded and enhanced
 NEWS 26  MAR 20  CAS databases on STN enhanced with new super role
                  for nanomaterial substances

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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 NEWS IPC8     For general information regarding STN implementation of IPC 8

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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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DICTIONARY FILE UPDATES:  20 MAR 2009  HIGHEST RN 1124448-78-7

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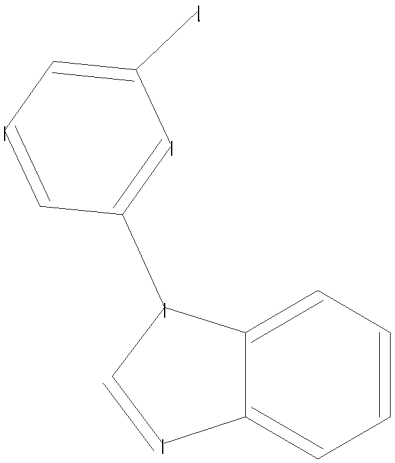
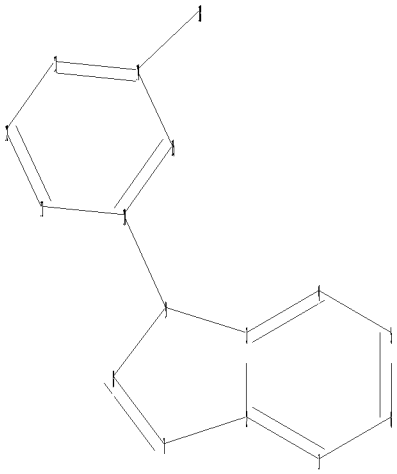




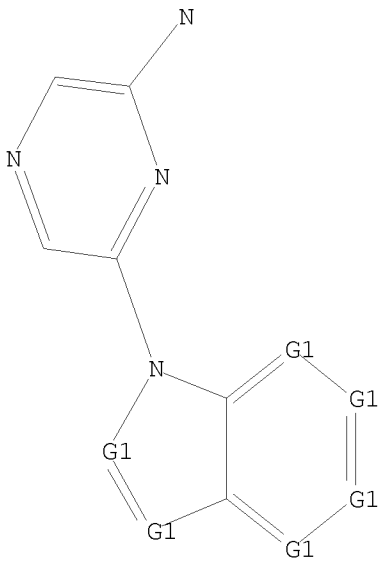
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
ring/chain nodes :
18
chain bonds :
9-10 14-18
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 10-11 10-15 11-12 12-13 13-14
14-15
exact/norm bonds :
2-7 3-9 7-8 8-9 9-10
exact bonds :
14-18
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15
isolated ring systems :
containing 1 : 10 :

G1:C,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 18:Atom

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED -      183 TO ITERATE

100.0% PROCESSED      183 ITERATIONS                              19 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:         2849 TO     4471
PROJECTED ANSWERS:             119 TO      641

L2           19 SEA SSS SAM L1

=> s l1 ful
FULL SEARCH INITIATED 14:05:38 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -     3270 TO ITERATE

100.0% PROCESSED     3270 ITERATIONS                            405 ANSWERS
SEARCH TIME: 00.00.01

L3          405 SEA SSS FUL L1

=> fil capl
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     185.88     186.10

FILE 'CAPLUS' ENTERED AT 14:05:41 ON 21 MAR 2009
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FILE COVERS 1907 - 21 Mar 2009 VOL 150 ISS 13
FILE LAST UPDATED: 20 Mar 2009 (20090320/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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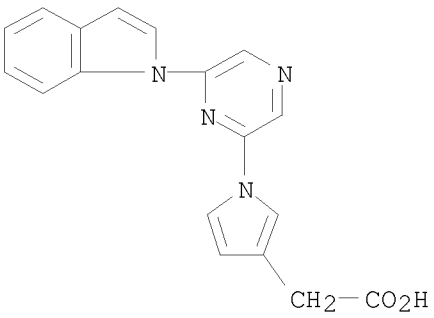
This file contains CAS Registry Numbers for easy and accurate substance identification.

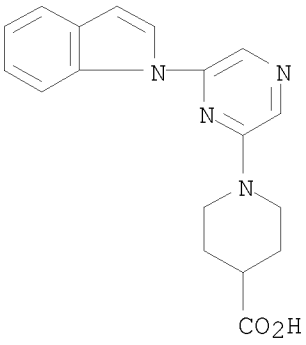
=> s l3
L4 11 L3

=> d l4 ibib hitstr abs 1-11

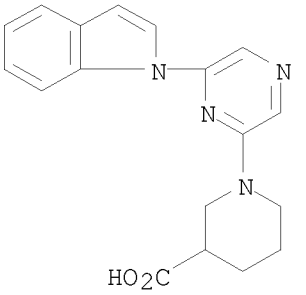
L4 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1190716 CAPLUS
DOCUMENT NUMBER: 149:524574
TITLE: Structure-activity relationships of pyrazine-based CK2 inhibitors: synthesis and evaluation of 2,6-disubstituted pyrazines and 4,6-disubstituted pyrimidines
AUTHOR(S): Suzuki, Yamato; Cluzeau, Jerome; Hara, Takafumi; Hirasawa, Akira; Tsujimoto, Gozoh; Oishi, Shinya; Ohno, Hiroaki; Fujii, Nobutaka
CORPORATE SOURCE: Graduate School of Pharmaceutical Sciences, Kyoto University, Kyoto, Japan
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (2008), 341(9), 554-561
CODEN: ARPMAS; ISSN: 0365-6233
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 875900-14-4P 1078718-42-9P 1078718-43-0P
1078718-44-1P 1078718-45-2P 1078718-46-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Structure-activity relationships of pyrazine-based CK2 inhibitors: synthesis and evaluation of 2,6-disubstituted pyrazines and 4,6-disubstituted pyrimidines)
RN 875900-14-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



RN 1078718-42-9 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



RN 1078718-43-0 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



RN 1078718-44-1 CAPLUS
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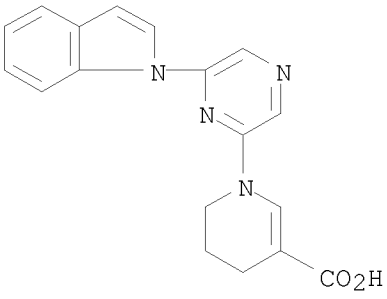
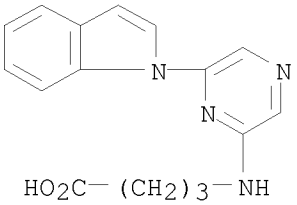
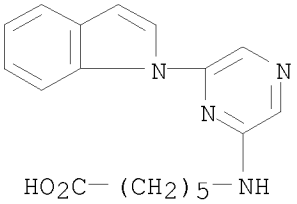


RN 1078718-45-2 CAPLUS
CN Butanoic acid, 4-[[6-(1H-indol-1-yl)-2-pyrazinyl]amino]- (CA INDEX NAME)



RN 1078718-46-3 CAPLUS
CN Hexanoic acid, 6-[[6-(1H-indol-1-yl)-2-pyrazinyl]amino]- (CA INDEX NAME)

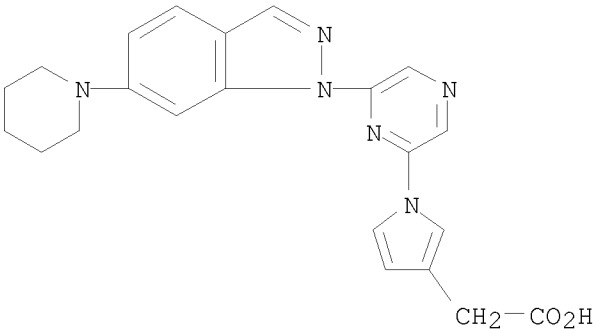


AB Structually related to the known CK2 inhibitors, 2,6-disubstituted pyrazine and 4,6-disubstituted pyrimidine derivs. were synthesized and their inhibitory activities toward CK2α and CK2α' were evaluated. Structure-activity relationship study has revealed that several pyrazine derivs. bearing a (pyrrol-3-yl)acetic acid and a monosubstituted aniline possess potent inhibitory activities.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1097319 CAPLUS
DOCUMENT NUMBER: 149:299805
TITLE: Antitumor agents containing pyrazine derivatives
INVENTOR(S): Sekitani, Yumiko; Yamada, Masaki; Nishimura, Kazumi
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 80pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008208074	A	20080911	JP 2007-46700	20070227

PRIORITY APPLN. INFO.: JP 2007-46700 20070227
OTHER SOURCE(S): MARPAT 149:299805
IT 940882-05-3P 940882-36-0P 940882-38-2P
940882-52-0P 940882-56-4P 940882-66-6P
940882-70-2P 940882-77-9P 940882-78-0P
1050682-08-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antitumor agents containing pyrazine derivs.)
RN 940882-05-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-36-0 CAPLUS
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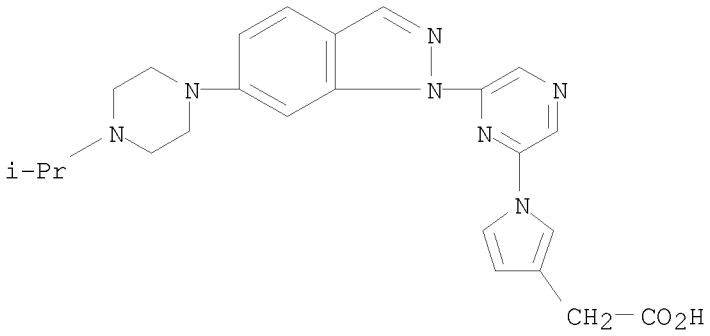
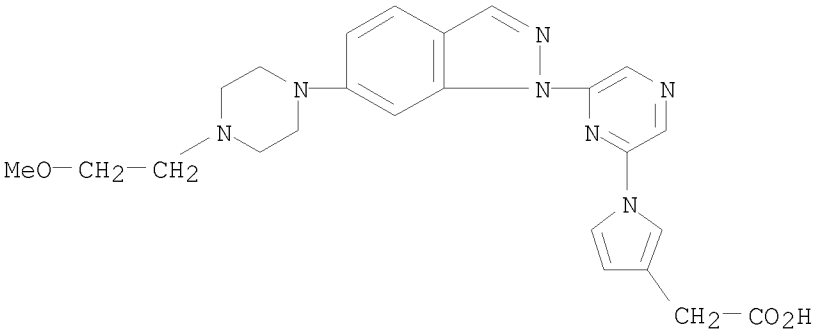
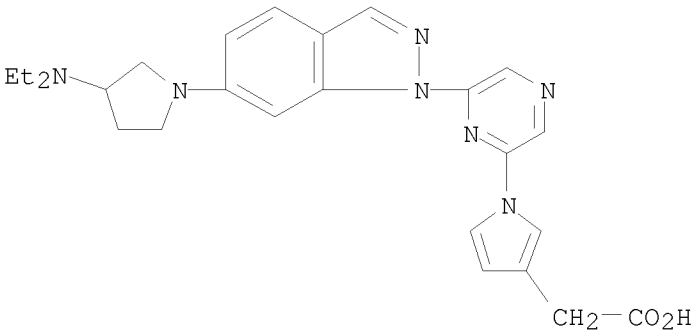


RN 940882-38-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(2-methoxyethyl)-1-piperazinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-52-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(diethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-56-4 CAPLUS
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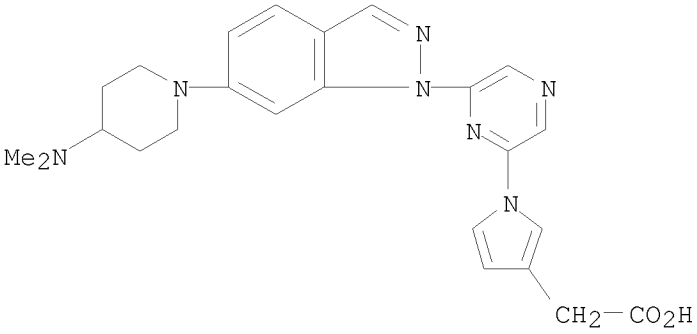
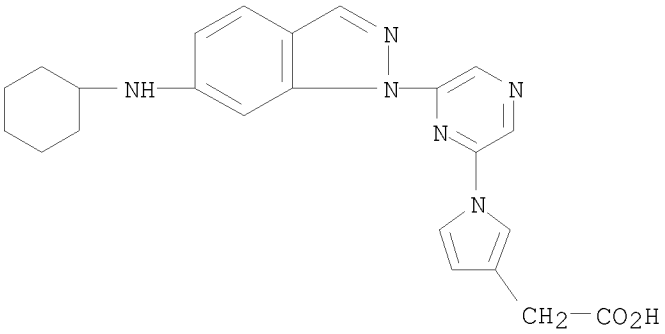
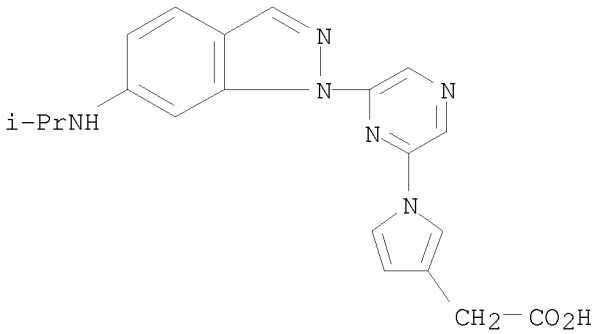


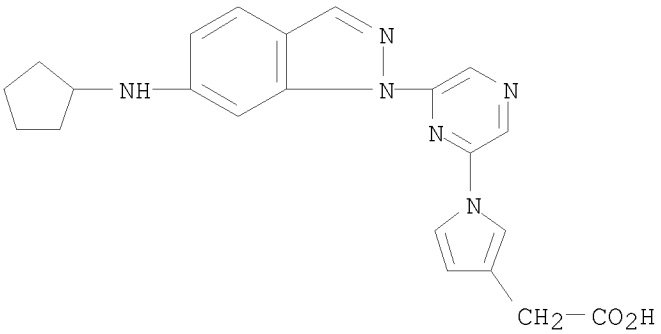
RN 940882-66-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclohexylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



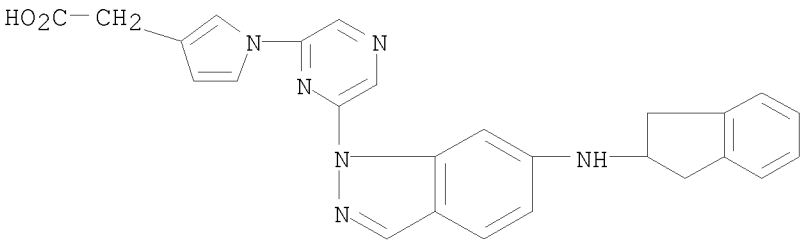
RN 940882-70-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1-methylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



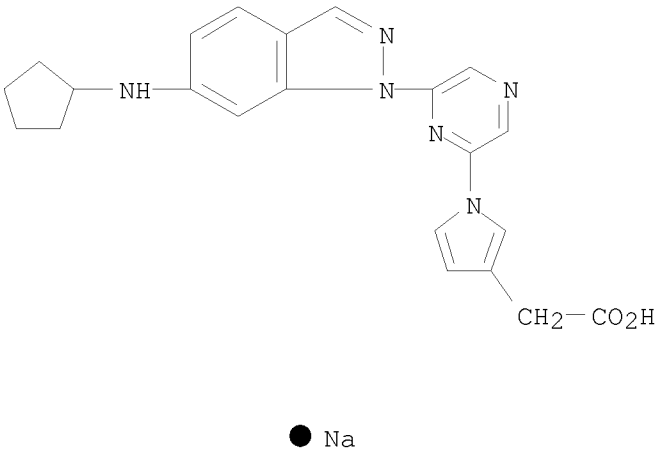
RN 940882-77-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclopentylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-78-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(2,3-dihydro-1H-inden-2-yl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 1050682-08-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclopentylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, sodium salt (1:1) (CA INDEX NAME)



● Na

IT 940881-86-7P 940881-92-5P 940881-98-1P
940882-03-1P 940882-07-5P 940882-11-1P
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940882-53-1P 940882-55-3P 940882-57-5P
940882-59-7P 940882-61-1P 940882-63-3P
940882-64-4P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(antitumor agents containing pyrazine derivs.)

RN 940881-86-7 CAPLUS
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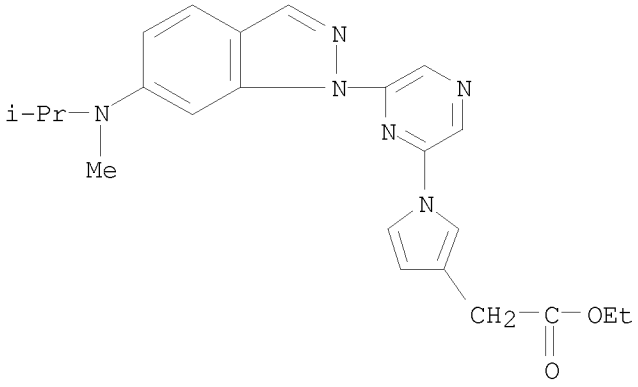

RN 940881-92-5 CAPLUS
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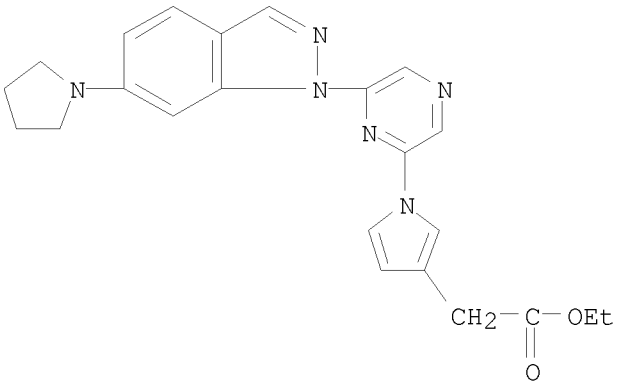

RN 940881-98-1 CAPLUS
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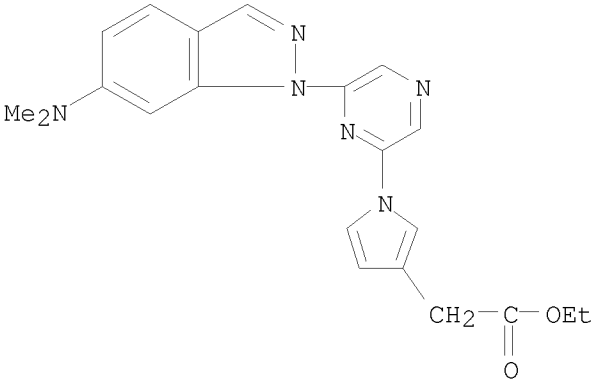

RN 940882-03-1 CAPLUS
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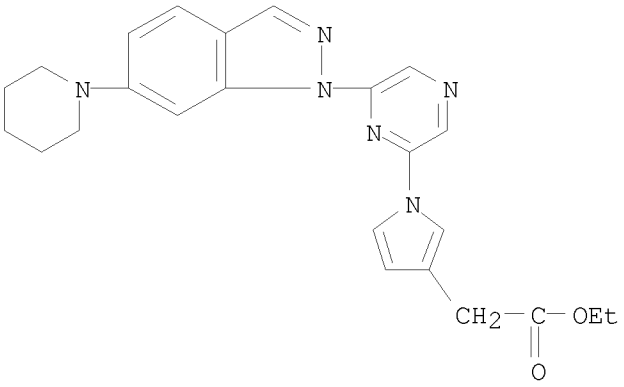
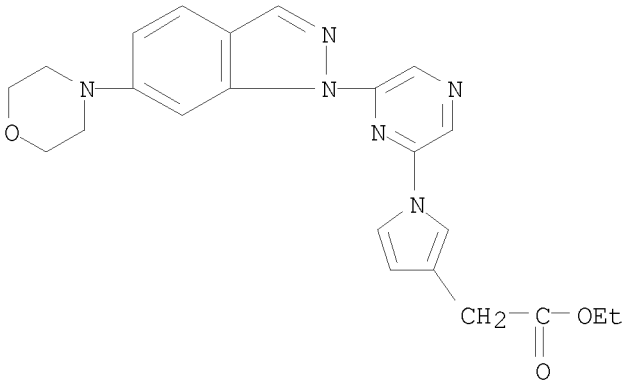


RN 940882-07-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-morpholinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 940882-11-1 CAPLUS
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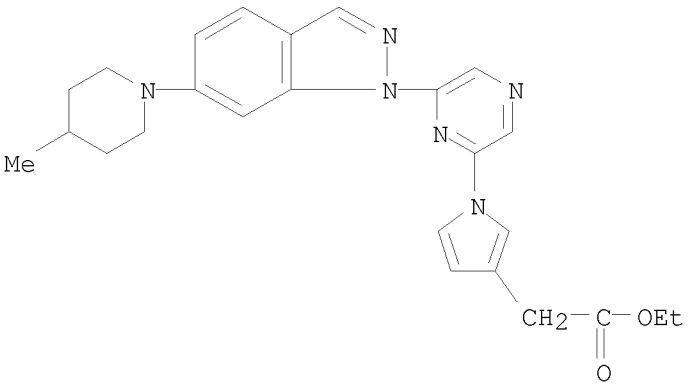
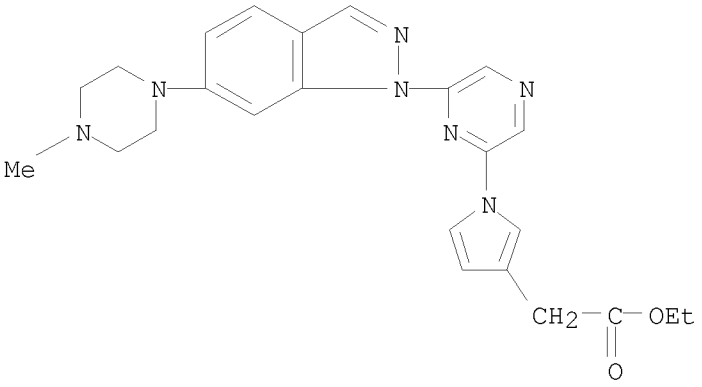
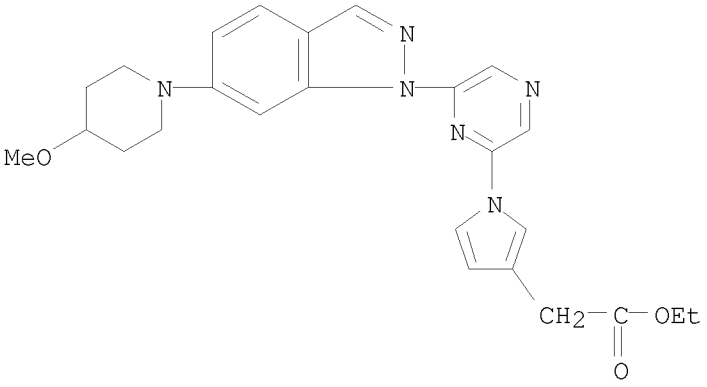


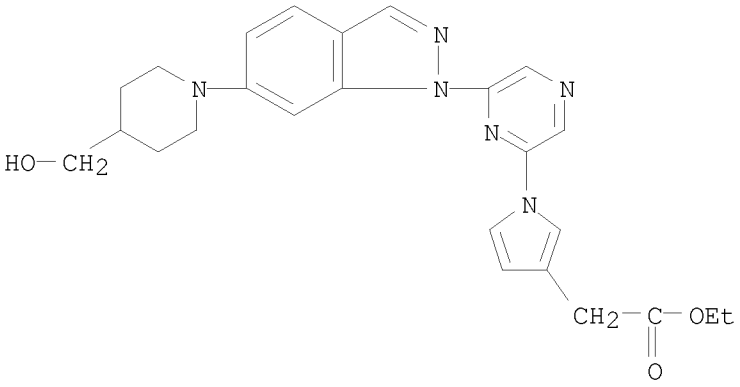
RN 940882-15-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methyl-1-piperazinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



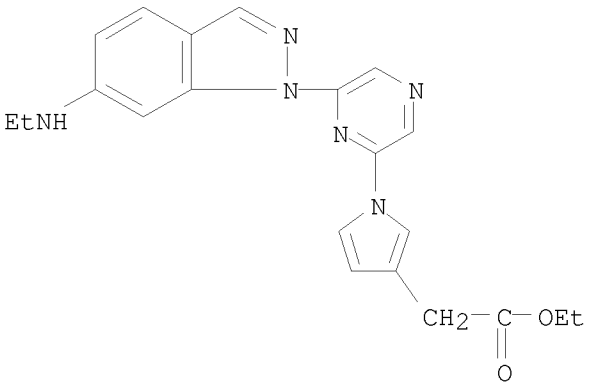
RN 940882-19-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methoxy-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



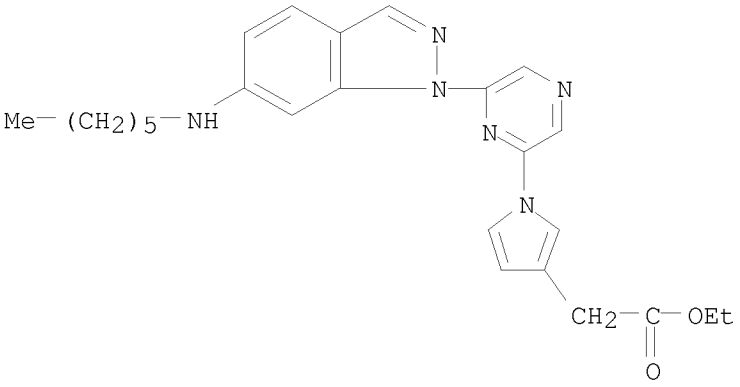
RN 940882-23-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(hydroxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



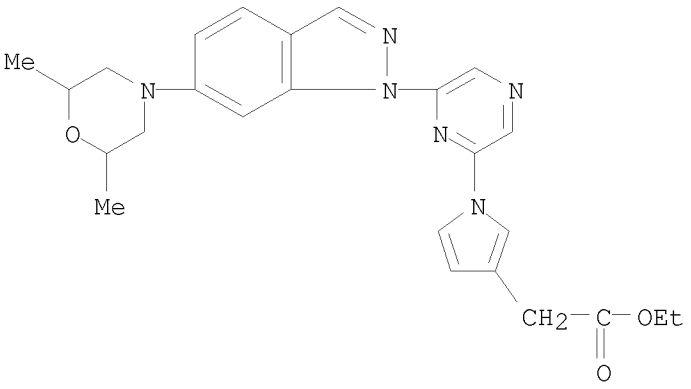
RN 940882-25-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(ethylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



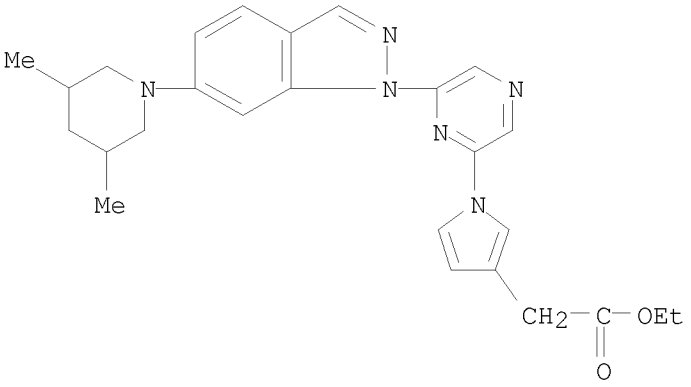
RN 940882-27-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(hexylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



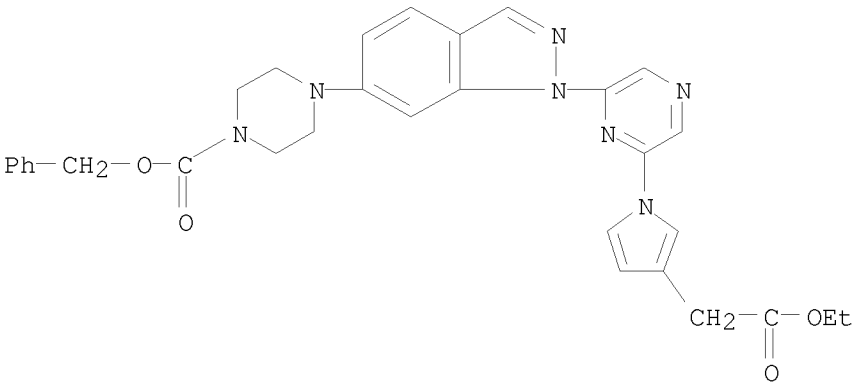
RN 940882-29-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(2,6-dimethyl-4-morpholinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



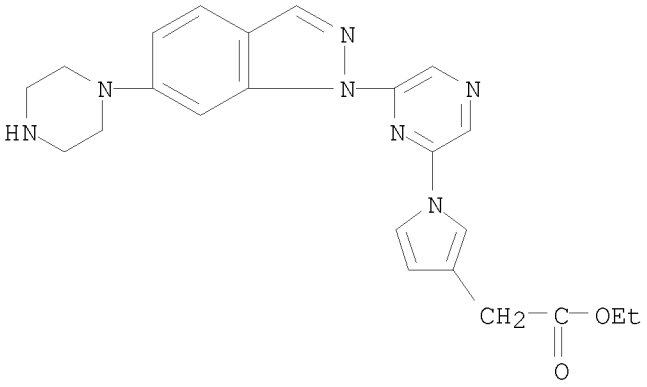
RN 940882-31-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(3,5-dimethyl-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



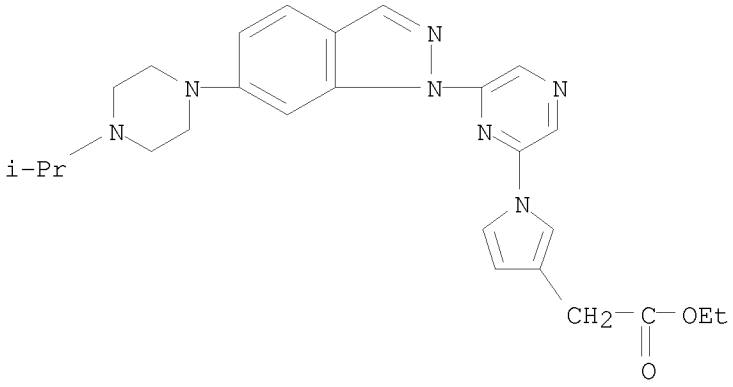
RN 940882-33-7 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[1-[6-[3-(2-ethoxy-2-oxoethyl)-1H-pyrrol-1-yl]-2-pyrazinyl]-1H-indazol-6-yl]-, phenylmethyl ester (CA INDEX NAME)



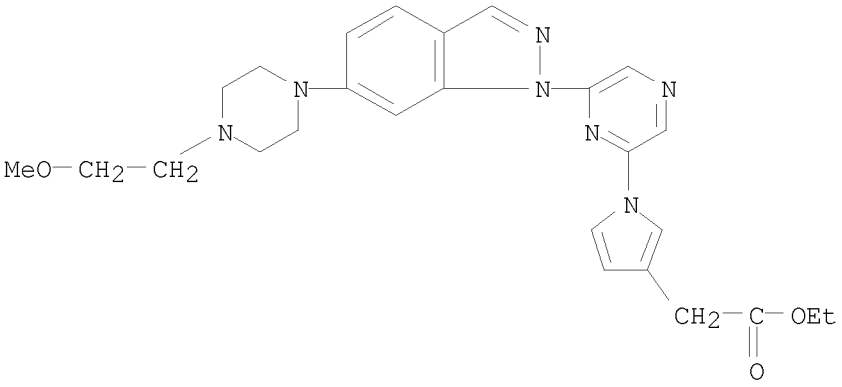
RN 940882-34-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-piperazinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



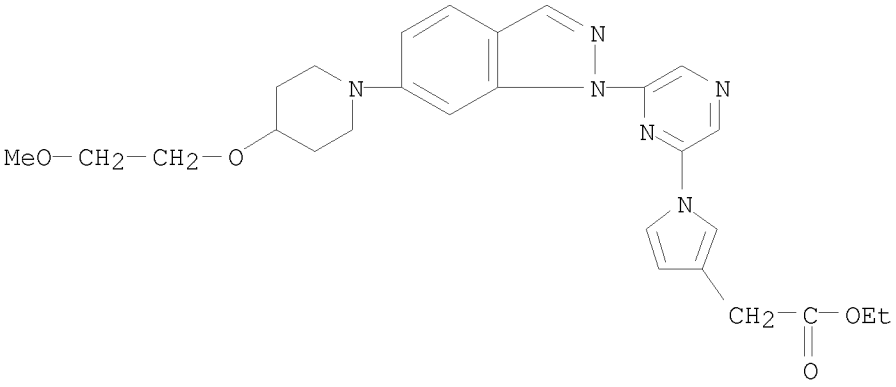
RN 940882-35-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(1-methylethyl)-1-piperazinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



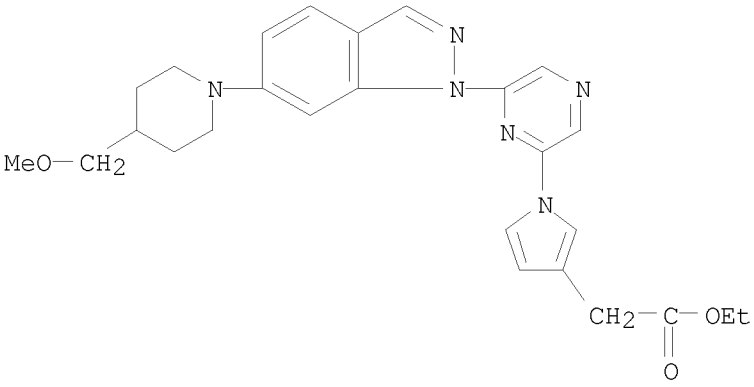
RN 940882-37-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(2-methoxyethyl)-1-piperazinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



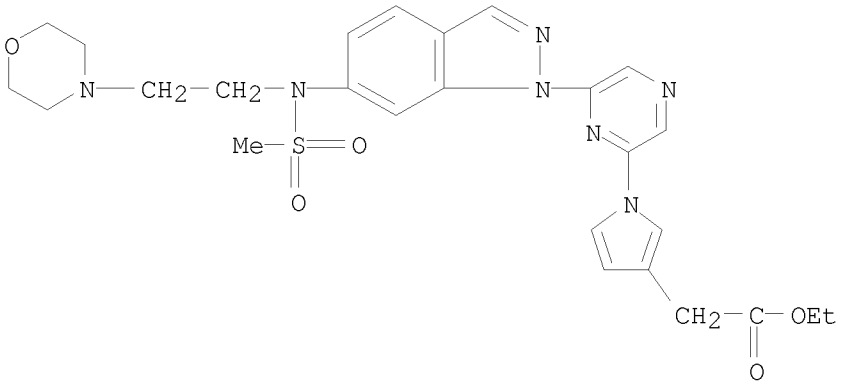
RN 940882-39-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(2-methoxyethoxy)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



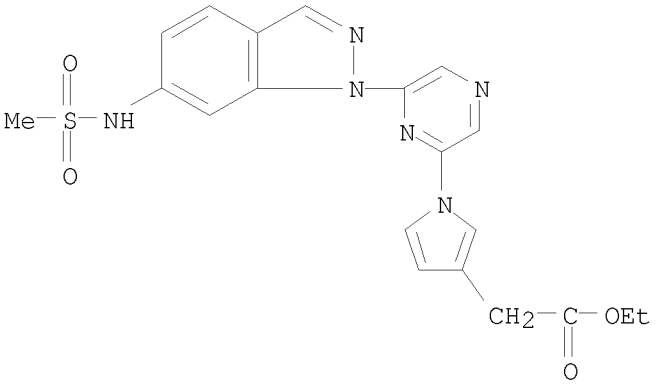
RN 940882-41-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(methoxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



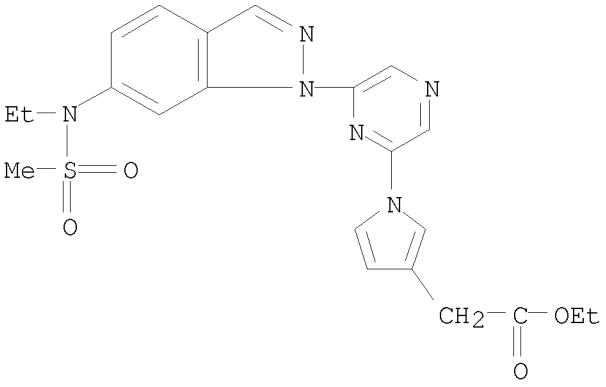
RN 940882-43-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)[2-(4-morpholinyl)ethyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



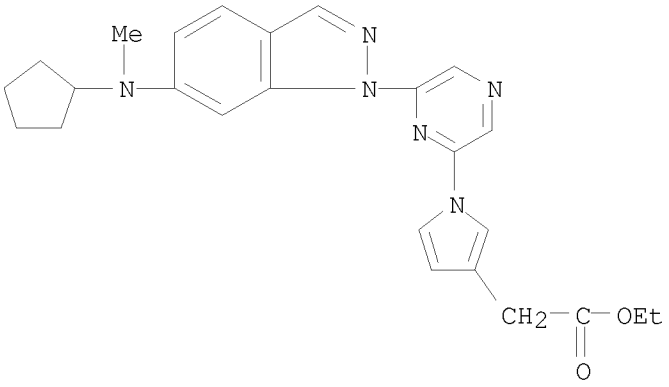
RN 940882-45-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



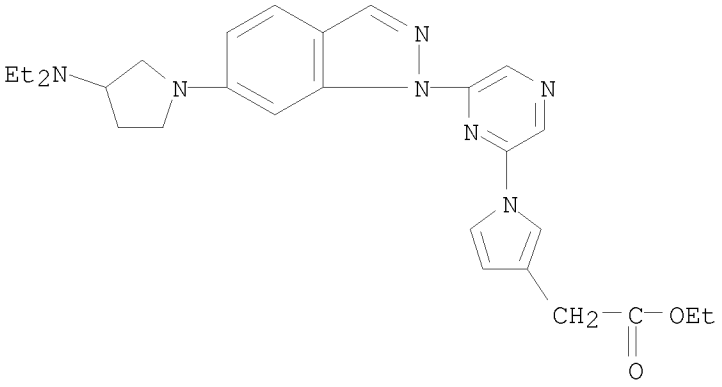
RN 940882-47-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[ethyl(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



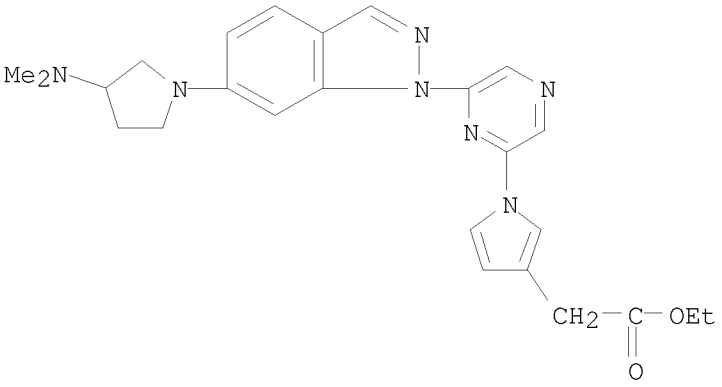
RN 940882-49-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclopentylmethylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



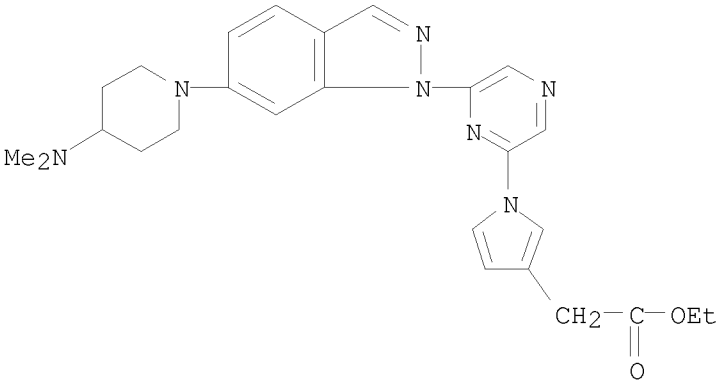
RN 940882-51-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(diethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



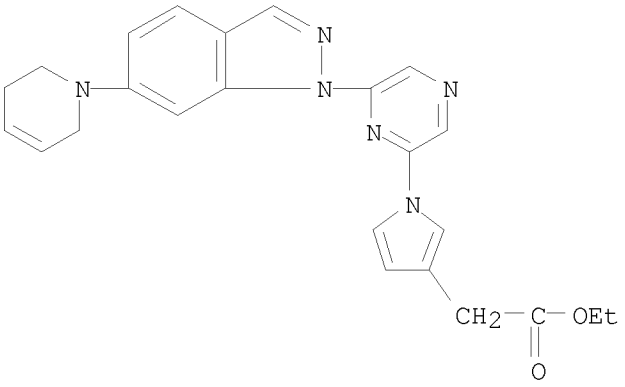
RN 940882-53-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(dimethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



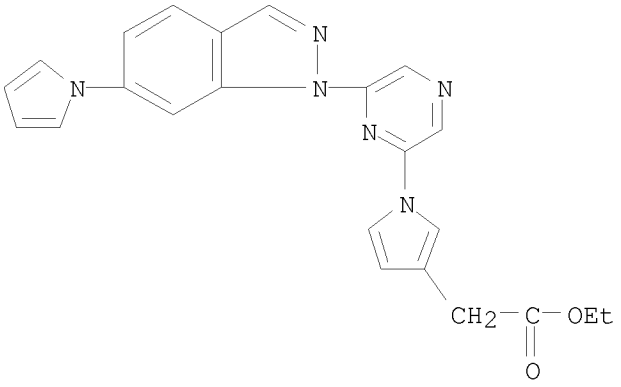
RN 940882-55-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(dimethylamino)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



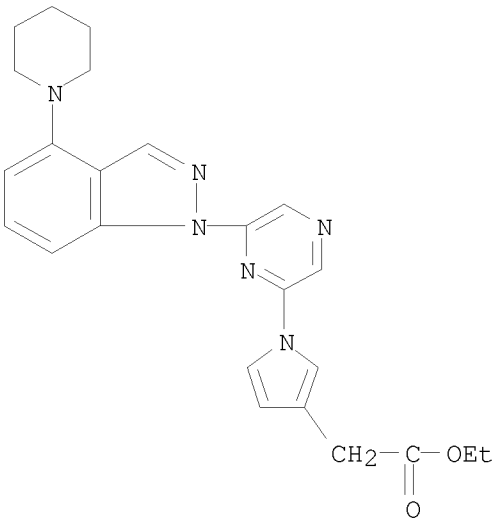
RN 940882-57-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(3,6-dihydro-1(2H)-pyridinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



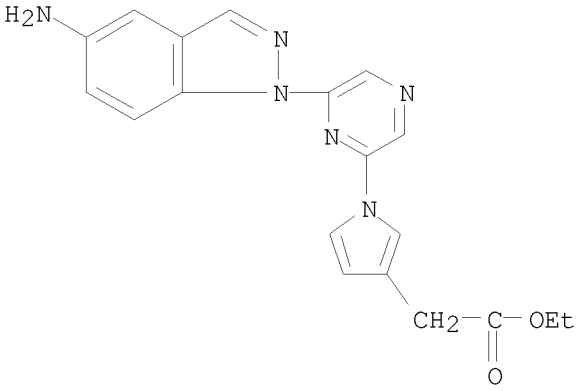
RN 940882-59-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1H-pyrrol-1-yl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



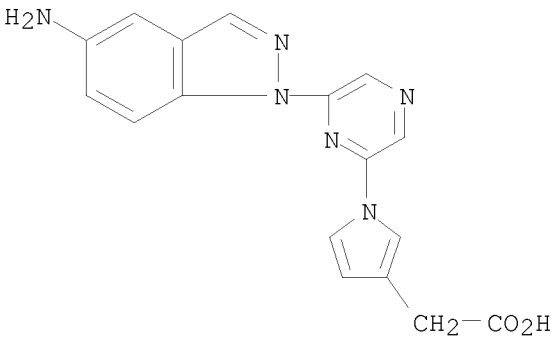
RN 940882-61-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-(1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 940882-63-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(5-amino-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 940882-64-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(5-amino-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



IT 940881-89-0P 940881-95-8P 940882-00-8P
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940882-28-0P 940882-30-4P 940882-32-6P
940882-40-6P 940882-42-8P 940882-44-0P
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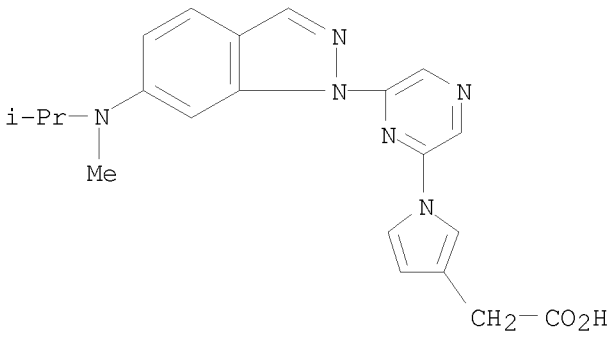
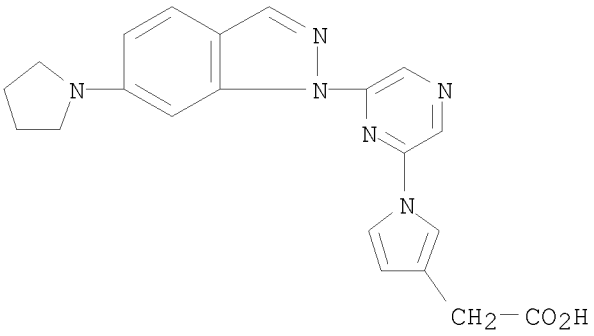
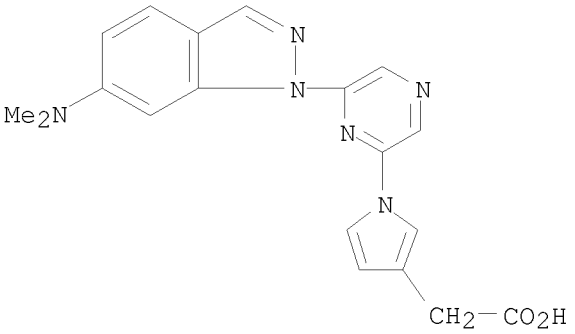
940882-75-7P 940882-76-8P 940882-79-1P
940882-80-4P 940882-81-5P 940882-82-6P
940882-83-7P 940882-84-8P 940882-85-9P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antitumor agents containing pyrazine derivs.)
RN 940881-89-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[methyl(1-methylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



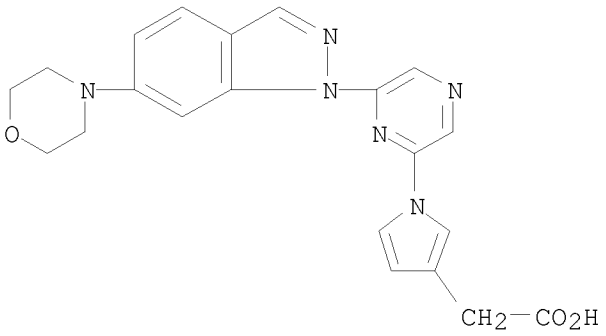
RN 940881-95-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-pyrrolidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



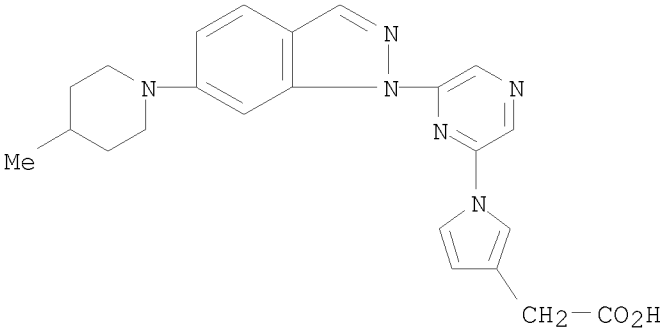
RN 940882-00-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(dimethylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-09-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-morpholinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-13-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methyl-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-17-7 CAPLUS
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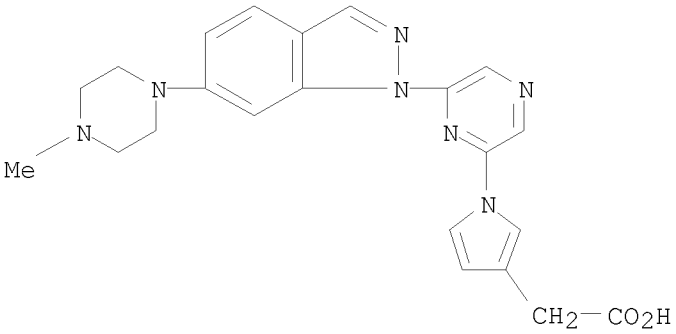

RN 940882-21-3 CAPLUS
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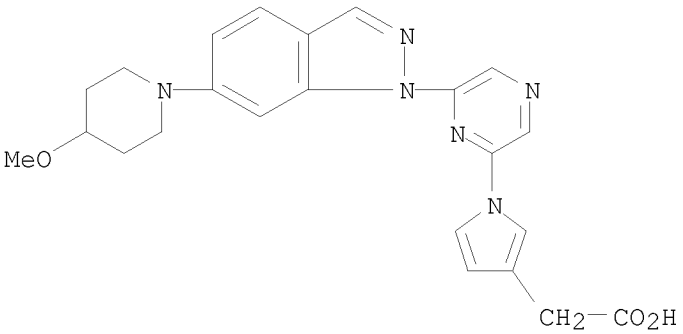
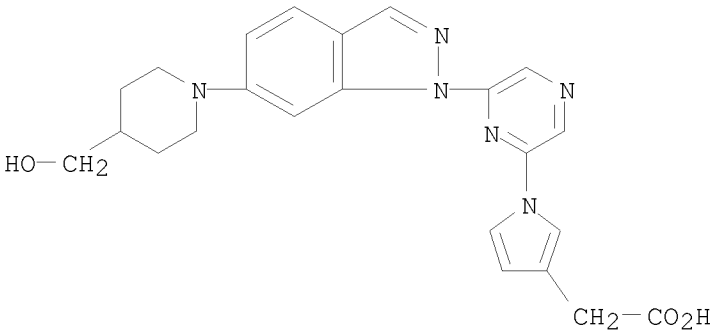
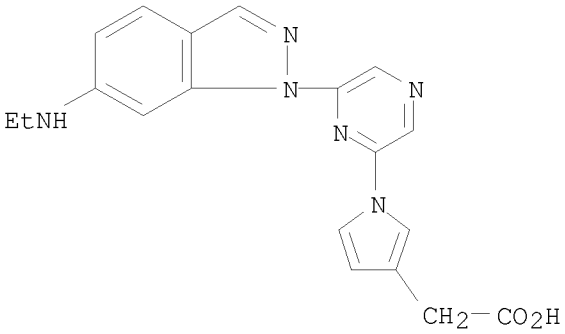


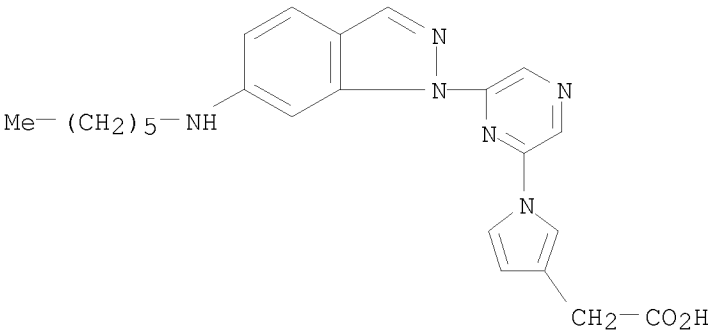
RN 940882-24-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(hydroxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-26-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(ethylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-28-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(hexylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-30-4 CAPLUS
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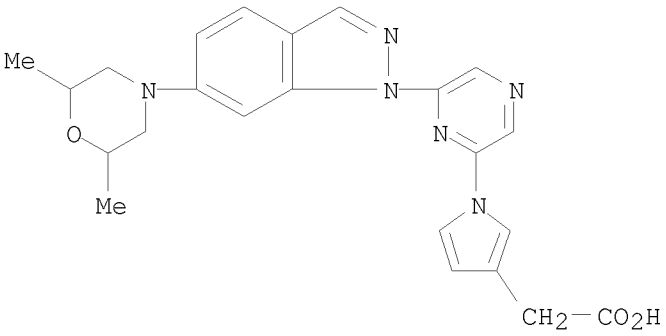

RN 940882-32-6 CAPLUS
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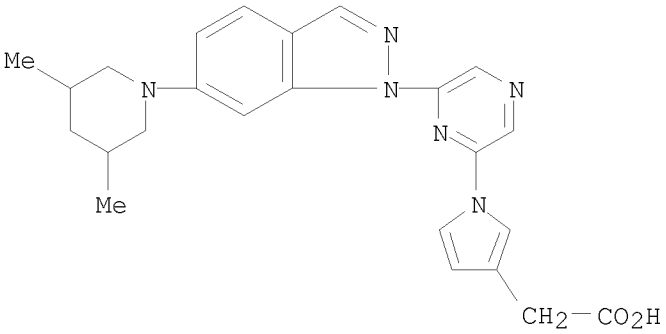

RN 940882-40-6 CAPLUS
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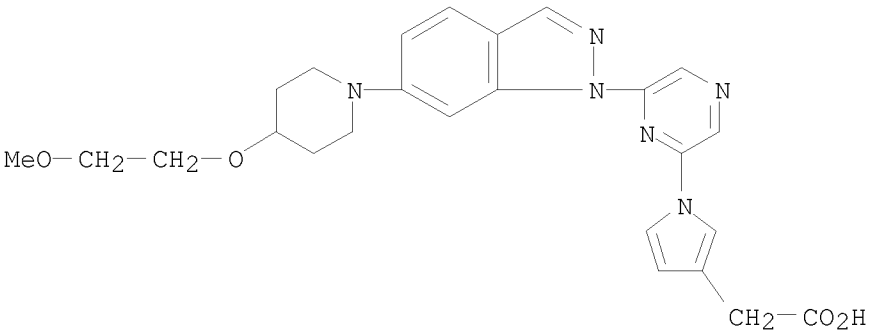
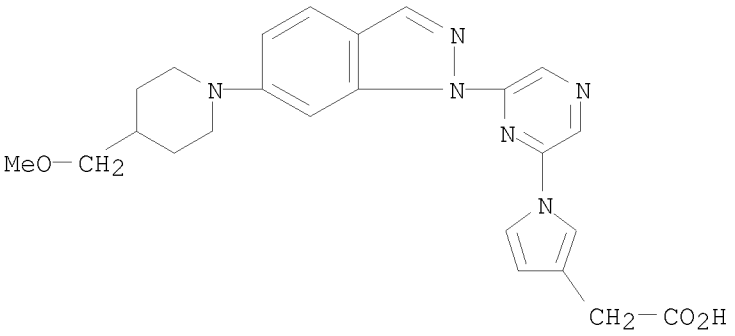
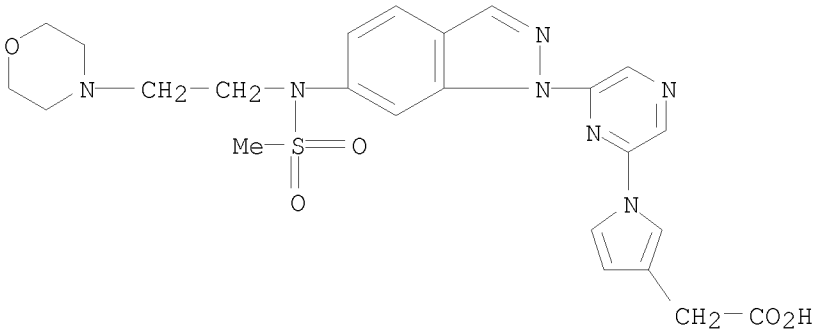


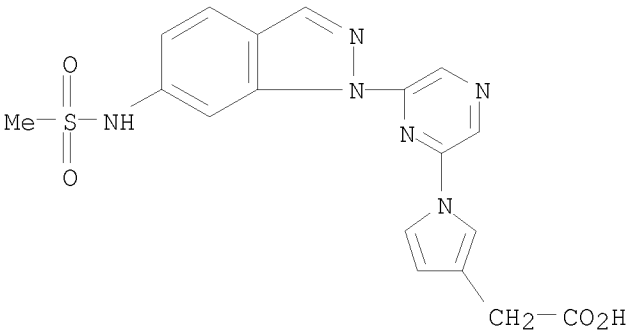
RN 940882-42-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(methoxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



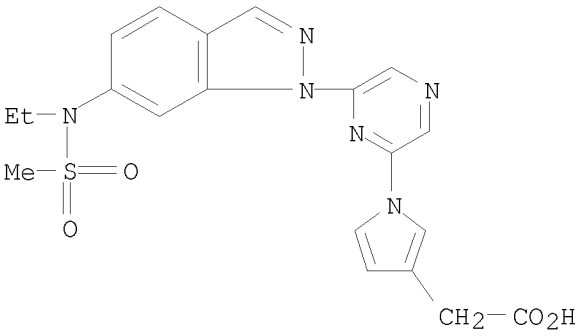
RN 940882-44-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)[2-(4-morpholinyl)ethyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



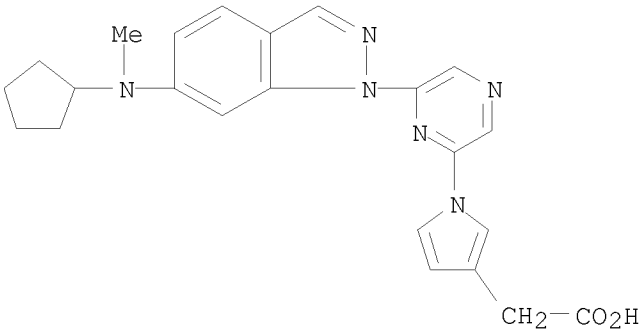
RN 940882-46-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



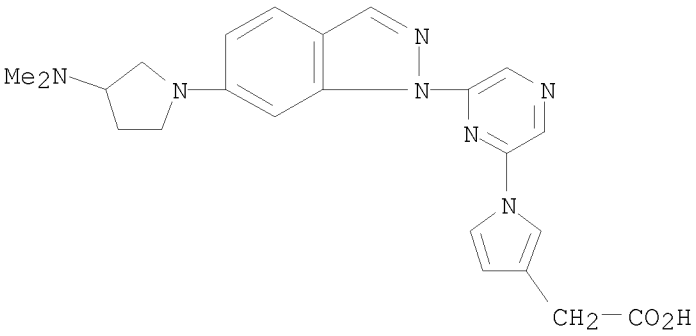
RN 940882-48-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[ethyl(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



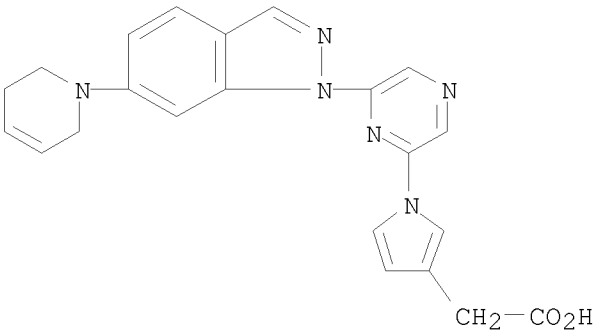
RN 940882-50-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclopentylmethylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



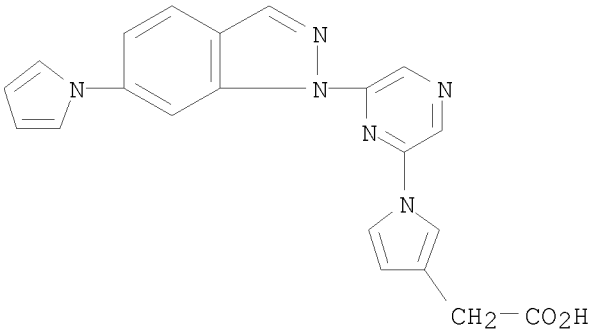
RN 940882-54-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(dimethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



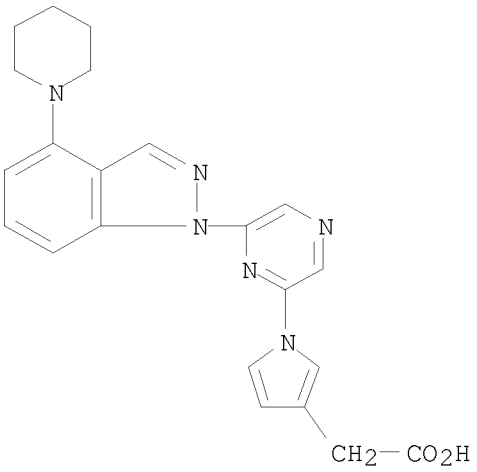
RN 940882-58-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(3,6-dihydro-1(2H)-pyridinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



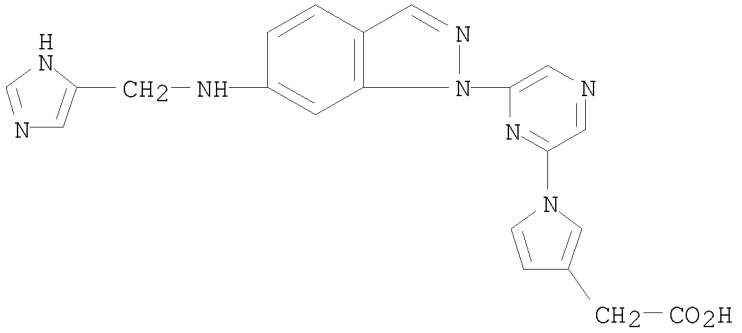
RN 940882-60-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1H-pyrrol-1-yl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



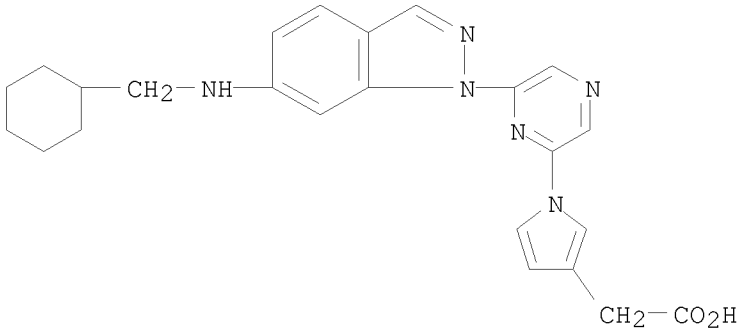
RN 940882-62-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-(1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



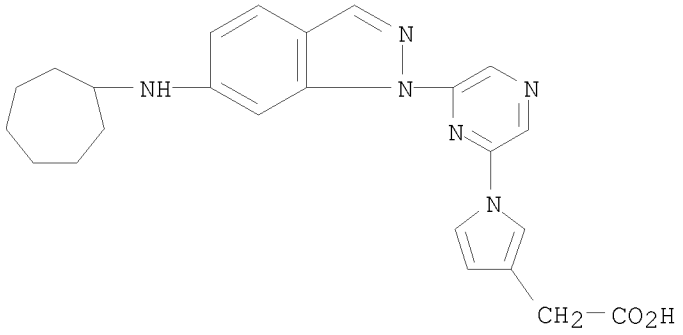
RN 940882-65-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1H-imidazol-5-ylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



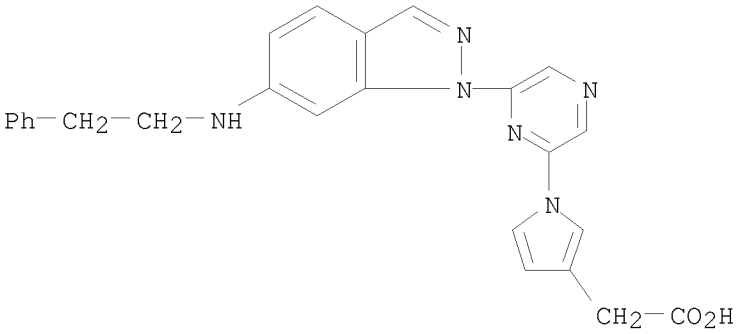
RN 940882-67-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(cyclohexylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



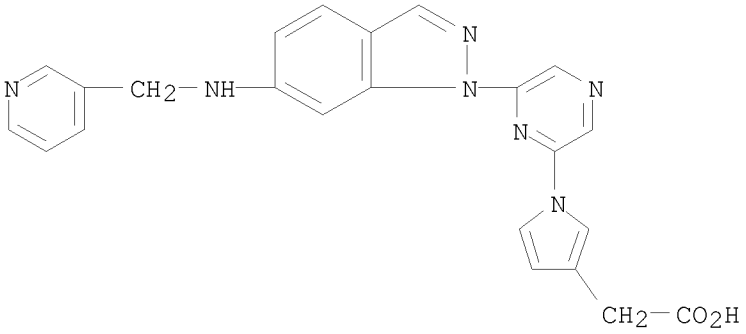
RN 940882-68-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cycloheptylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



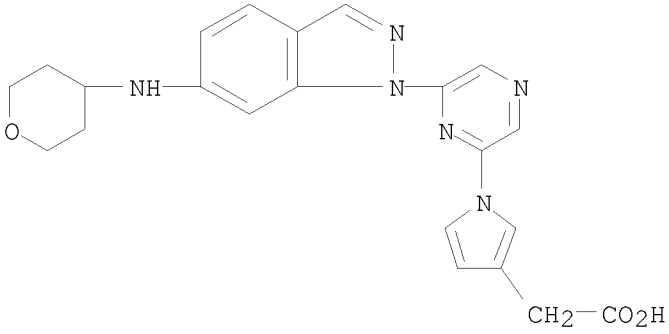
RN 940882-69-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(2-phenylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



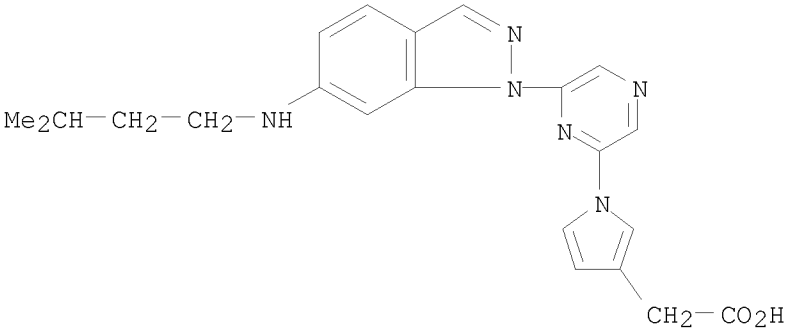
RN 940882-71-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(3-pyridinylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



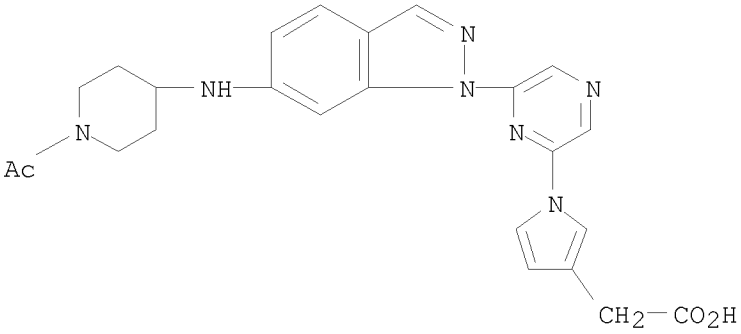
RN 940882-72-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(tetrahydro-2H-pyran-4-yl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



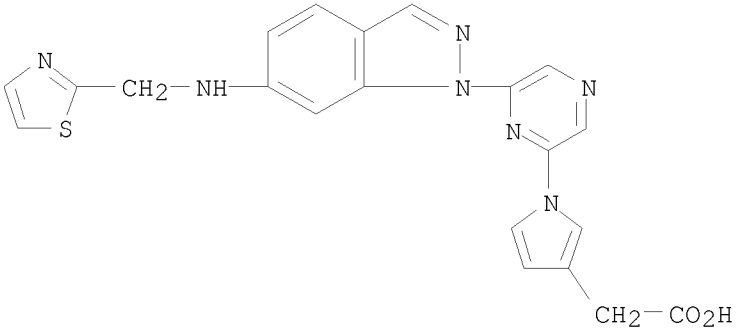
RN 940882-73-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(3-methylbutyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



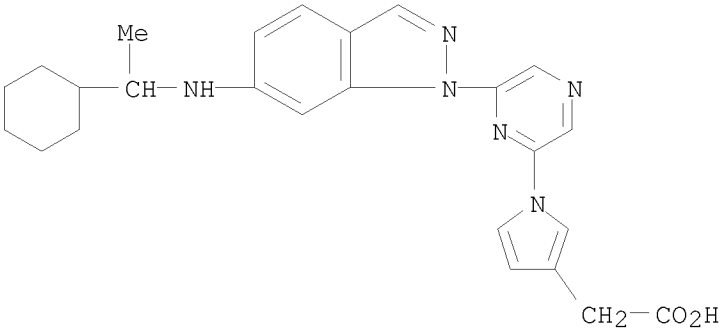
RN 940882-74-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1-acetyl-4-piperidinyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



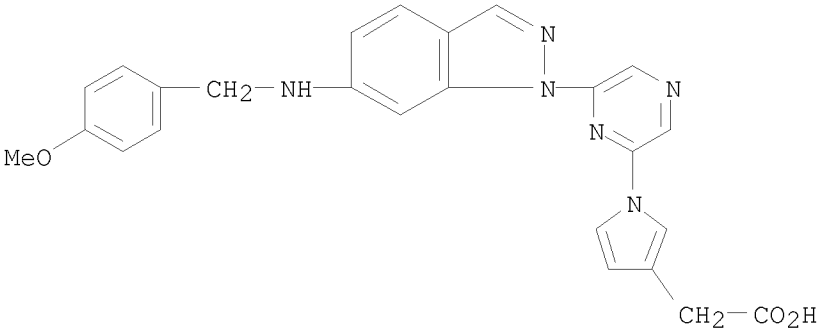
RN 940882-75-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(2-thiazolylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



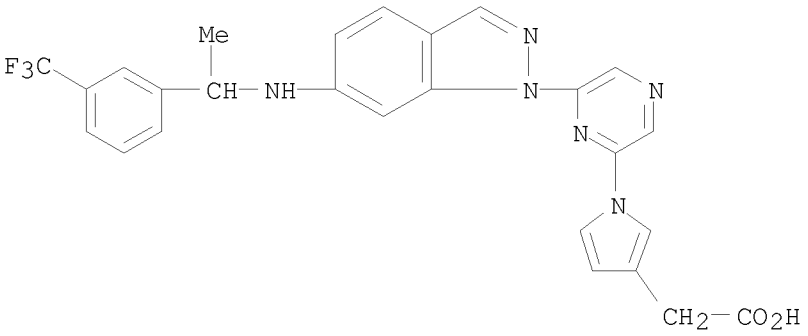
RN 940882-76-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1-cyclohexylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



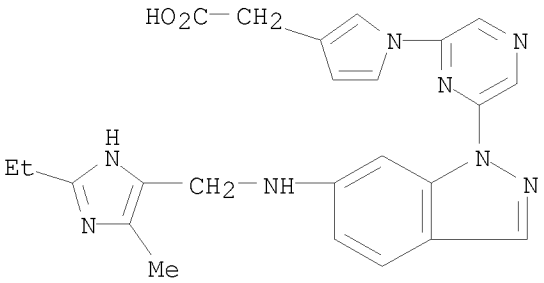
RN 940882-79-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[(4-methoxyphenyl)methyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



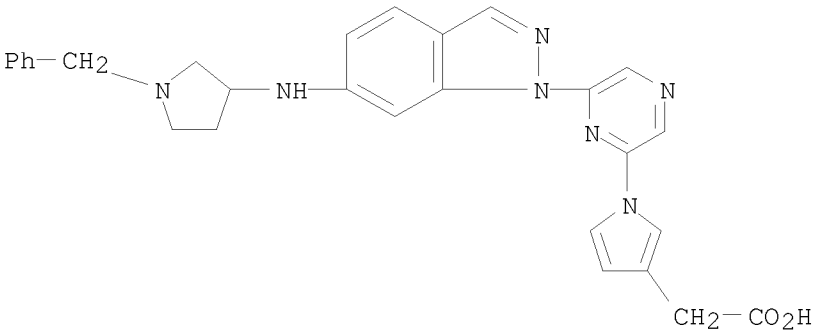
RN 940882-80-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[1-[3-(trifluoromethyl)phenyl]ethyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



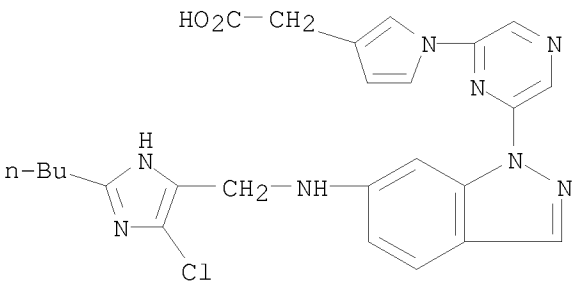
RN 940882-81-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[(2-ethyl-4-methyl-1H-imidazol-5-yl)methyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



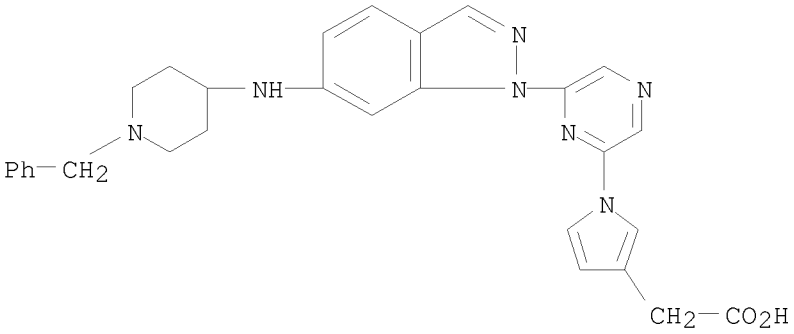
RN 940882-82-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[1-(phenylmethyl)-3-pyrrolidinyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



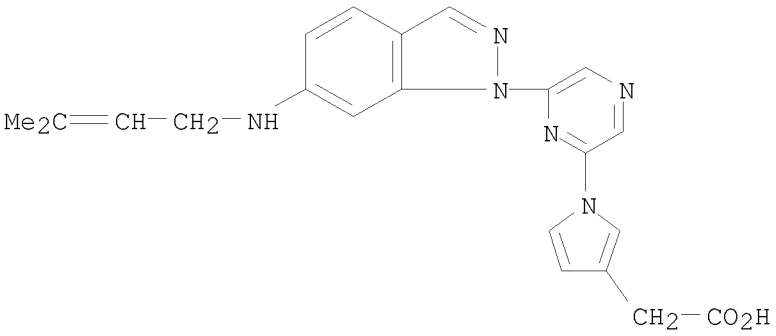
RN 940882-83-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[(2-butyl-5-chloro-1H-imidazol-4-yl)methyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-84-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[1-(phenylmethyl)-4-piperidinyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-85-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(3-methyl-2-buten-1-yl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



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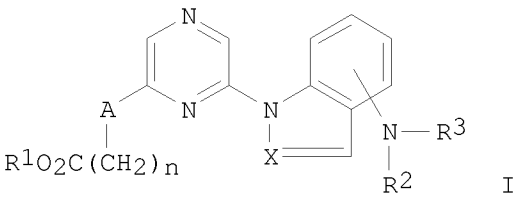


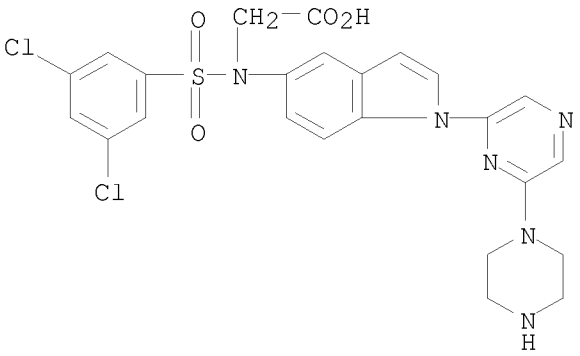
I

AB The invention provides an antitumor agent containing a pyrazine derivative represented by a general formula I (n = 0-2; R1 = H, C1-4 alkyl; A = indolediyl, pyrrolediyl, furandiyl, thiophenediyl, etc.; R2, R3 = H, C1-8 alkyl, C3-8 (un)substituted branched alkyl, C3-8 (un)substituted cyclic alkyl, etc., wherein R2 and R3 can form a (un)substituted 5- or 6-membered heterocyclic group), or its pharmaceutically acceptable salt as an active component. For example, 1-[6-[6-(cyclopentylamino)-1H-indazol-1-yl]-2-pyrazinyl]-1H-Pyrrole-3-acetic acid was prepared, and examined for its antitumor effect in mouse and human leukemia, colon cancer, lung cancer, breast cancer, and prostate cancer cells.

L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1011384 CAPLUS
DOCUMENT NUMBER: 149:288938
TITLE: Preparation of new substituted arylsulphonylglycines as inhibitors of the interaction between glycogen phosphorylase and GL subunit of glycogen-associated protein phosphatase 1 and their pharmaceutical compositions useful for treating diabetes
INVENTOR(S): Wagner, Holger; Langkopf, Elke; Streicher, Ruediger; Eckhardt, Matthias; Schuler-Metz, Annette; Pautsch, Alexander; Schoelch, Corinna
PATENT ASSIGNEE(S): Boehringer Ingelheim International G.m.b.H., Germany
SOURCE: PCT Int. Appl., 397pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008099000	A2	20080821	WO 2008-EP51824	20080215
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102007007751	A1	20080821	DE 2007-102007007751	20070216
PRIORITY APPLN. INFO.:			DE 2007-102007007751A	20070216

OTHER SOURCE(S): MARPAT 149:288938
IT 1049029-33-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of substituted arylsulfonylglycines as inhibitors of interaction between glycogen phosphorylase and GL subunit of glycogen-associated protein phosphatase 1 for treating diabetes mellitus)
RN 1049029-33-5 CAPLUS
CN Glycine, N-[(3,5-dichlorophenyl)sulfonyl]-N-[1-[6-(1-piperazinyl)-2-pyrazinyl]-1H-indol-5-yl]-, hydrochloride (1:1) (CA INDEX NAME)

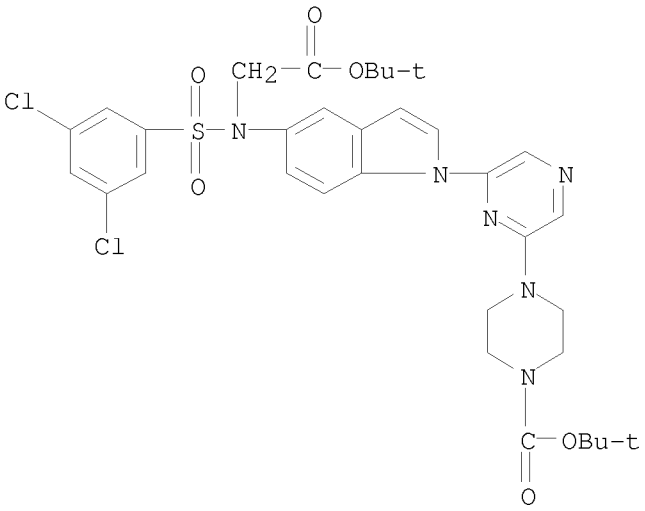


● HCl

IT 1049020-88-3P 1049021-59-1P 1049022-04-9P
1049025-73-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of substituted arylsulfonylglycines as inhibitors of interaction between glycogen phosphorylase and GL subunit of glycogen-associated protein phosphatase 1 for treating diabetes mellitus)

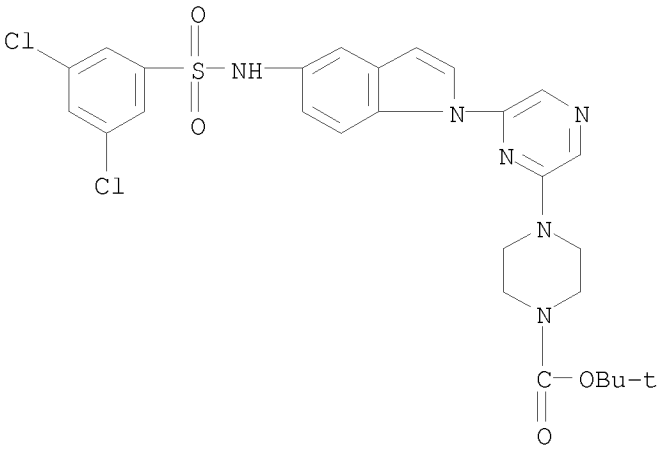
RN 1049020-88-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[6-[5-[[(3,5-dichlorophenyl)sulfonyl][2-(1,1-dimethylethoxy)-2-oxoethyl]amino]-1H-indol-1-yl]-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

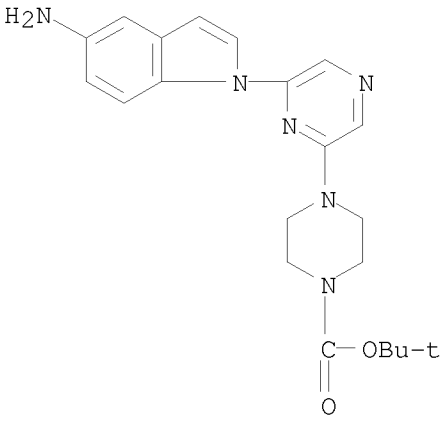


RN 1049021-59-1 CAPLUS

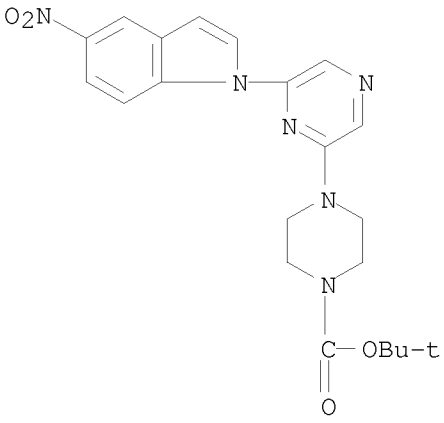
CN 1-Piperazinecarboxylic acid, 4-[6-[5-[[(3,5-dichlorophenyl)sulfonyl]amino]-1H-indol-1-yl]-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



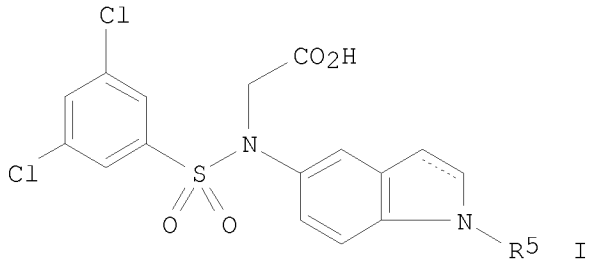
RN 1049022-04-9 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[6-(5-amino-1H-indol-1-yl)-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 1049025-73-1 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[6-(5-nitro-1H-indol-1-yl)-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



GI



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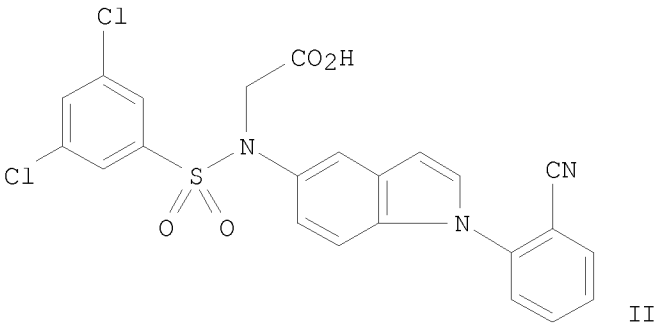


II

AB The invention is related to the preparation of substituted arylsulfonylglycines I [R5 = (un)substituted Ph, pyridazin-3-yl, pyrimidin-2-yl, pyrimidin-4-yl, pyrimidin-5-yl, pyrazin-2-yl, pyridin-2-yl, pyridin-3-yl], tautomers, enantiomers, diastereomers, and their mixts. and their salts, and their analogs which have the ability to suppress the interaction of glycogen phosphorylase with the GL subunit of glycogen-associated protein phosphatase 1 (PP1), and to their pharmaceutical compns. useful for treating diabetes mellitus. Thus, alkylation of 3,5-dichloro-N-(1H-indol-5-yl)benzenesulfonamide with tert-Bu 2-bromoacetate in DMF in the presence of K2CO3, N-arylation of indole with

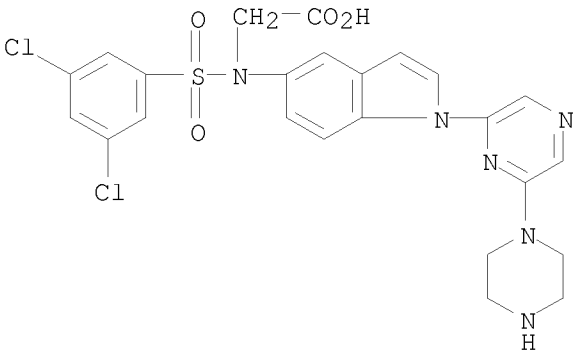
2-iodobenzonitrile in toluene in the presence of K3PO4 and CuI and cleavage of the tert-Bu group gave phenylsulfinylglycine II. In a binding test, arylsulfonylglycines I inhibited the interaction of human liver glycogen phosphorylase with protein PP1R3 (GL subunit of glycogen-associated PP1) with IC50 values in the range of 9 nM to 15 μM.

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:1004593 CAPLUS
DOCUMENT NUMBER: 149:288936
TITLE: Preparation of new substituted arylsulphonylglycines as inhibitors of the interaction between glycogen phosphorylase and GL subunit of glycogen-associated protein phosphatase 1 and their pharmaceutical compositions useful for treating diabetes
INVENTOR(S): Wagner, Holger; Langkopf, Elke; Eckhardt, Matthias; Streicher, Ruediger; Schoelch, Corinna; Schuler-Metz, Annette; Pautsch, Alexander
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma G.m.b.H. & Co. K.-G., Germany
SOURCE: Ger. Offen., 276pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102007007751	A1	20080821	DE 2007-102007007751	20070216
WO 2008099000	A2	20080821	WO 2008-EP51824	20080215

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: DE 2007-102007007751A 20070216
IT 1049029-33-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of substituted arylsulfonylglycines as inhibitors of interaction between glycogen phosphorylase and GL subunit of glycogen-associated protein phosphatase 1 for treating diabetes mellitus)
RN 1049029-33-5 CAPLUS
CN Glycine, N-[(3,5-dichlorophenyl)sulfonyl]-N-[1-[6-(1-piperazinyl)-2-pyrazinyl]-1H-indol-5-yl]-, hydrochloride (1:1) (CA INDEX NAME)

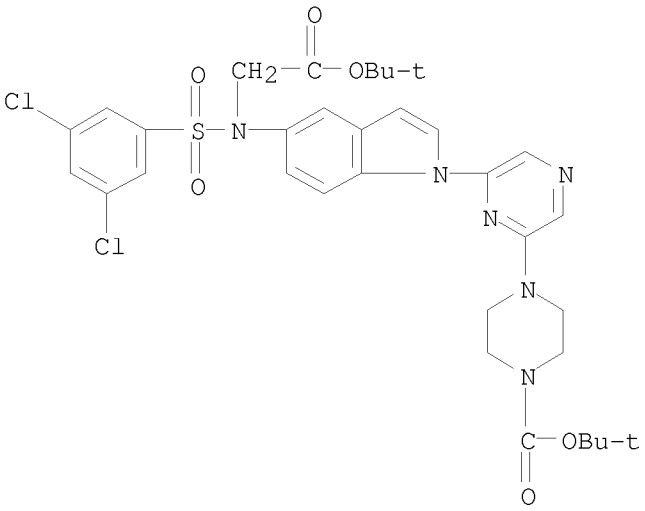


● HCl

IT 1049020-88-3P 1049021-59-1P 1049022-04-9P
1049025-73-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of substituted arylsulfonylglycines as inhibitors of interaction between glycogen phosphorylase and GL subunit of glycogen-associated protein phosphatase 1 for treating diabetes mellitus)

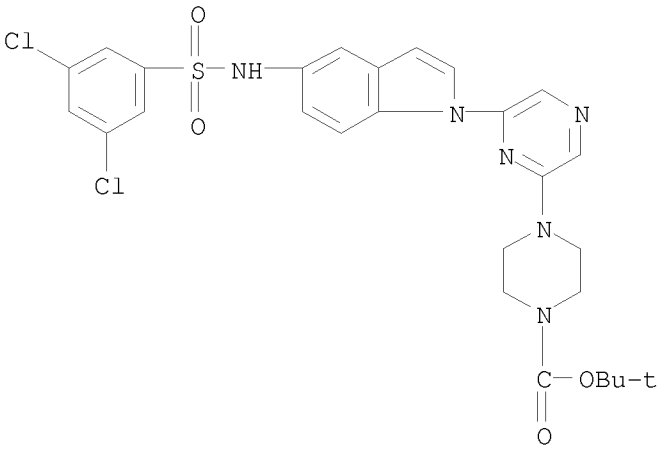
RN 1049020-88-3 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[6-[5-[[(3,5-dichlorophenyl)sulfonyl][2-(1,1-dimethylethoxy)-2-oxoethyl]amino]-1H-indol-1-yl]-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

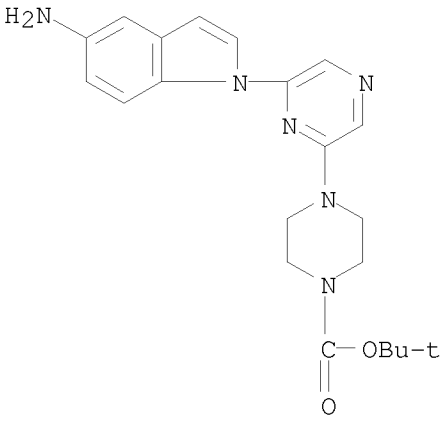


RN 1049021-59-1 CAPLUS

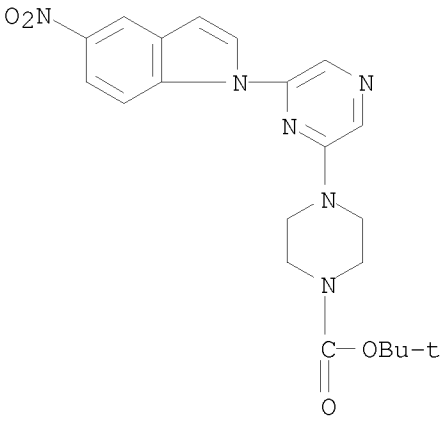
CN 1-Piperazinecarboxylic acid, 4-[6-[5-[[(3,5-dichlorophenyl)sulfonyl]amino]-1H-indol-1-yl]-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



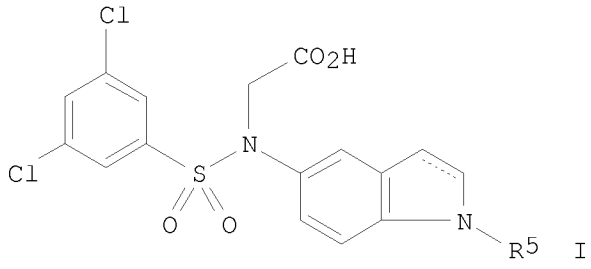
RN 1049022-04-9 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[6-(5-amino-1H-indol-1-yl)-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



RN 1049025-73-1 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[6-(5-nitro-1H-indol-1-yl)-2-pyrazinyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



GI



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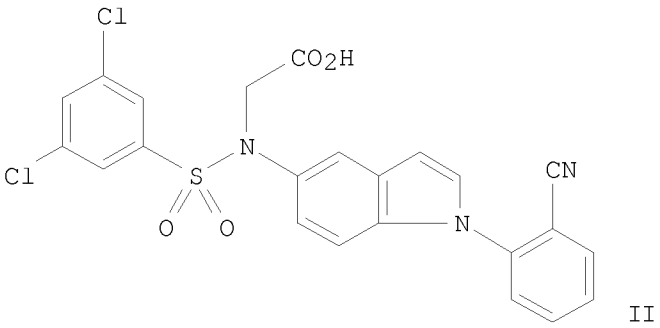


II

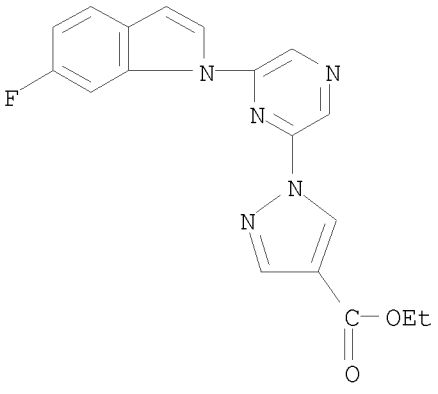
AB The invention is related to the preparation of substituted arylsulfonylglycines I [R5 = (un)substituted Ph, pyridazin-3-yl, pyrimidin-2-yl, pyrimidin-4-yl, pyrimidin-5-yl, pyrazin-2-yl, pyridin-2-yl, pyridin-3-yl], tautomers, enantiomers, diastereomers, and their mixts. and their salts, and their analogs which have the ability to suppress the interaction of glycogen phosphorylase with the GL subunit of glycogen-associated protein phosphatase 1 (PP1), and to their pharmaceutical compns. useful for treating diabetes mellitus. Thus, alkylation of 3,5-dichloro-N-(1H-indol-5-yl)benzenesulfonamide with tert-Bu 2-bromoacetate in DMF in the presence of K2CO3, N-arylation of indole with

2-iodobenzonitrile in toluene in the presence of K3PO4 and CuI and cleavage of the tert-Bu group gave phenylsulfinylglycine II. In a binding test, arylsulfonylglycines I inhibited the interaction of human liver glycogen phosphorylase with protein PP1R3 (GL subunit of glycogen-associated PP1) with IC50 values in the range of 9 nM to 15 μM.

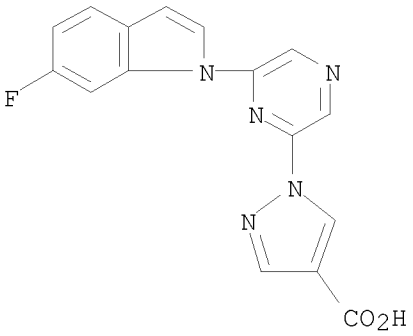
L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:939664 CAPLUS
DOCUMENT NUMBER: 149:239318
TITLE: Pyrazine derivs. as antitumor agents
INVENTOR(S): Sekitani, Yumiko; Yamada, Masaki; Nishimura, Kazumi
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008179567	A	20080807	JP 2007-14604	20070125

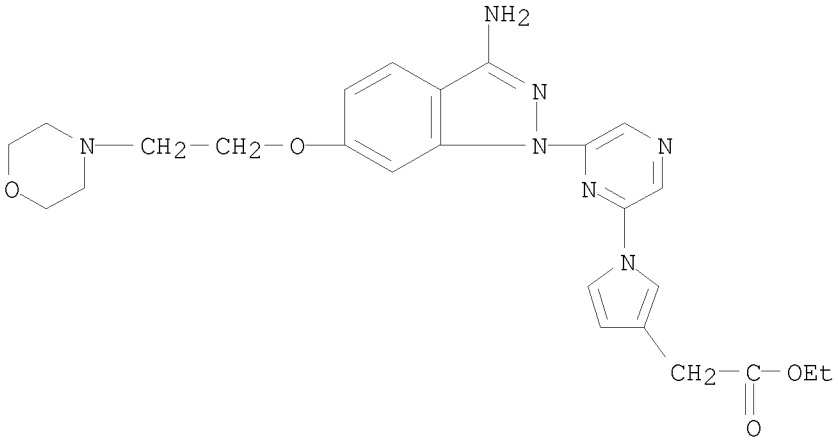
PRIORITY APPLN. INFO.: JP 2007-14604 20070125
OTHER SOURCE(S): MARPAT 149:239318
IT 1044598-65-3P 1044598-67-5P, 1-[6-(6-Fluoro-1H-indol-1-yl)pyrazin-2-yl]-1H-pyrazole-4-carboxylic acid 1044598-68-6P 1044598-70-0P 1044598-71-1P, Ethyl 2-[1-[6-(3-amino-6-chloro-1H-indazolyl)pyrazin-2-yl]pyrrol-3-yl]acetate 1044598-72-2P 1044598-73-3P, Ethyl 2-[1-[6-(6-cyano-1H-indazolyl)pyrazin-2-yl]pyrrol-3-yl]acetate 1044598-74-4P 1044598-75-5P, Ethyl 2-[1-[6-(6-trifluoromethyl-1H-indazolyl)pyrazin-2-yl]pyrrol-3-yl]acetate 1044598-76-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pyrazine derivs. as antitumor agents)
RN 1044598-65-3 CAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[6-(6-fluoro-1H-indol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



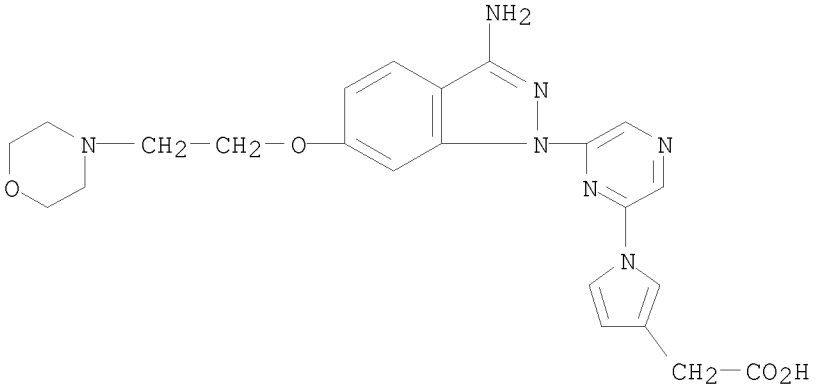
RN 1044598-67-5 CAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[6-(6-fluoro-1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



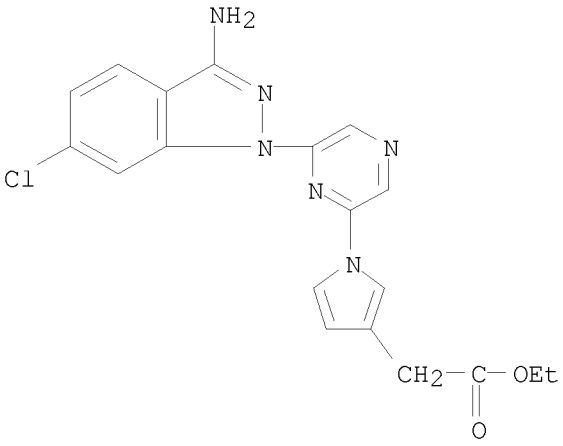
RN 1044598-68-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-amino-6-[2-(4-morpholinyl)ethoxy]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



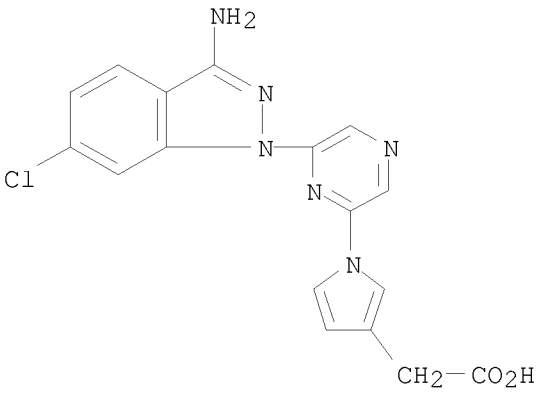
RN 1044598-70-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-amino-6-[2-(4-morpholinyl)ethoxy]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



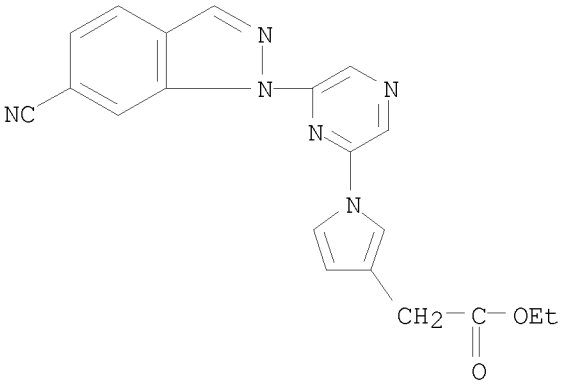
RN 1044598-71-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-amino-6-chloro-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



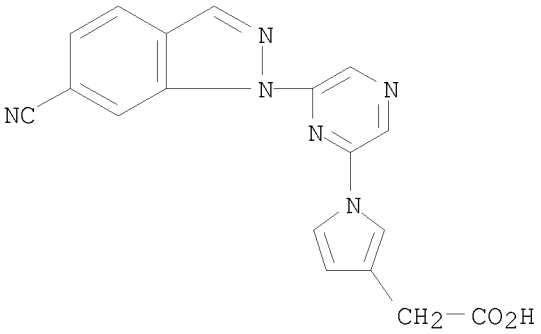
RN 1044598-72-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-amino-6-chloro-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



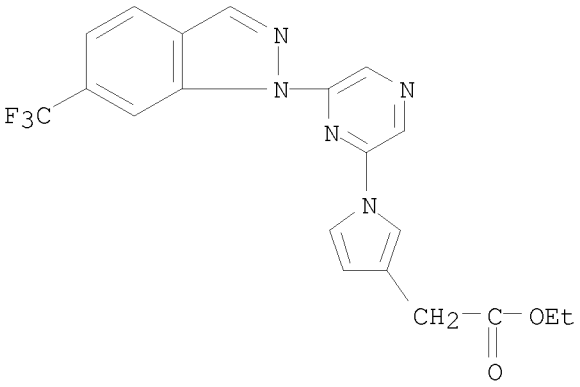
RN 1044598-73-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(6-cyano-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



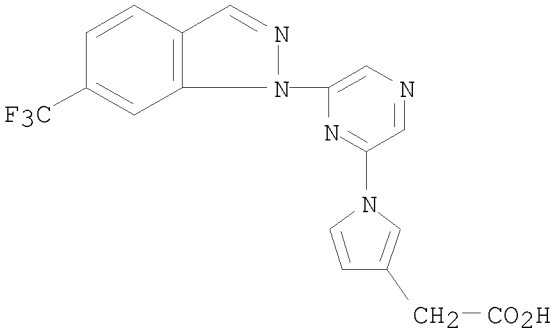
RN 1044598-74-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(6-cyano-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



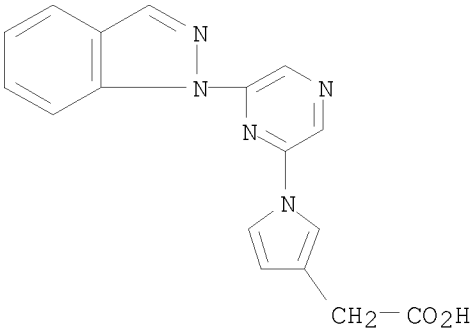
RN 1044598-75-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(trifluoromethyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



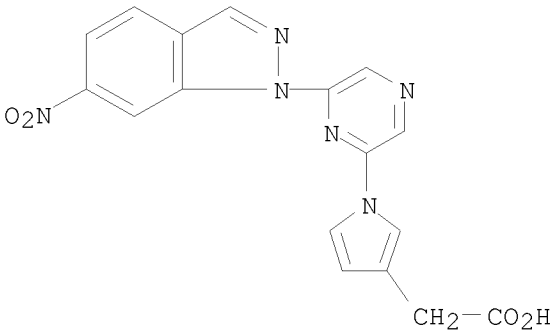
RN 1044598-76-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(trifluoromethyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



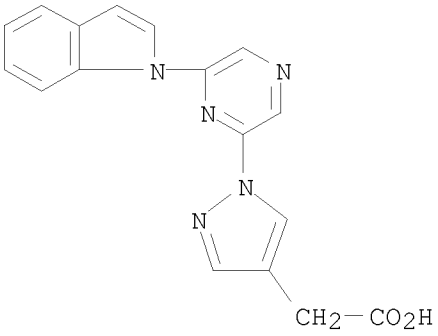
IT 875900-37-1 875900-43-9 1044598-77-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pyrazine derivs. as antitumor agents)
RN 875900-37-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



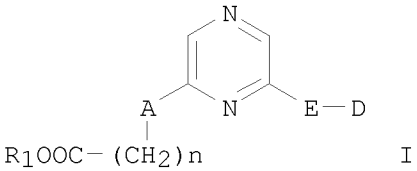
RN 875900-43-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(6-nitro-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



RN 1044598-77-7 CAPLUS
CN 1H-Pyrazole-4-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



GI



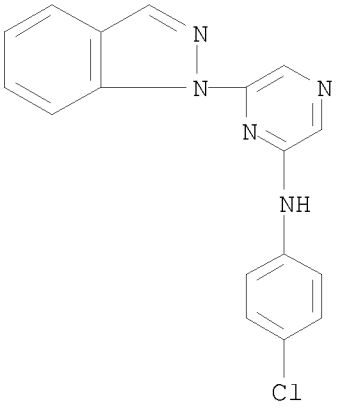
AB The pyrazine derivs. (I; n = 0-2; R1 = H, C1-3 alkyl; A = heterocyclic; E = direct bonding or -NH-; E = -NH-; D = (substituted) Ph at thiazolyl, aromatic) and their pharmaceutically acceptable salts are claimed as antitumor agents for treatment of colon cancer, lung cancer, prostate cancer, hepatoma, mammary cancer, and leukemia. I were prepared, and their antitumor effects were tested.

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2008:447377 CAPLUS
DOCUMENT NUMBER: 148:426887
TITLE: Preparation of indazolyl derivatives useful as potassium channel modulating agents
INVENTOR(S): Eriksen, Birgitte L.; Soerensen, Ulrik Svane; Hougaard, Charlotte; Teuber, Lene; Peters, Dan; Christophersen, Palle; Johansen, Tina Holm
PATENT ASSIGNEE(S): Neurosearch A/S, Den.
SOURCE: PCT Int. Appl., 38pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008040753	A1	20080410	WO 2007-EP60493	20071003

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: DK 2006-1280 A 20061003
US 2006-827940P P 20061003
OTHER SOURCE(S): MARPAT 148:426887
IT 1018474-72-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel indazolyl derivs. as potassium channel modulators useful in treatment and prevention of diseases - associated with activity of potassium channels)
RN 1018474-72-0 CAPLUS
CN 2-Pyrazinamine, N-(4-chlorophenyl)-6-(1H-indazol-1-yl)- (CA INDEX NAME)



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I or II [n = 0-3; X = O, S or NR1 (wherein R1 = H, alkyl, cycloalkyl or cycloalkyl-alkyl); Y = alkyl, cycloalkyl, (un)substituted Ph, etc.; A1 = N or CR2; A2 = N or CH, provided, however, that only one of A1 and A2 represents N; R1-R4 = H, alkyl, aminoalkyl, etc.; or R1 and R2, together with the heteroarom. ring to which they are attached, form a benzo-fused ring; and R3 and R4 = H, alkyl, aminoalkyl, etc.], useful as potassium channel modulating agents, were prepared E.g., a 2-step synthesis of III (14%) and IV (5%), starting from 2,4-dichloro-6-methylpyrimidine and 4-chloroaniline, was given. The SC100 value determined for III was 0.08 μM which is an indication of its strong SK3 activating properties. Moreover the invention is directed to pharmaceutical compns. useful for the treatment or alleviation of diseases or disorders associated with the activity of potassium channels, in particular respiratory diseases, epilepsy, convulsions, seizures, absence seizures, vascular spasms, coronary artery spasms, renal disorders, polycystic kidney disease, bladder spasms, urinary incontinence, bladder outflow obstruction, erectile dysfunction, gastrointestinal dysfunction, secretory diarrhea, ischemia, cerebral ischemia, ischemic heart, disease, angina pectoris, coronary heart disease, autism, ataxia, traumatic brain injury, Parkinson's disease, bipolar disorder, psychosis, schizophrenia, anxiety, depression, mania, mood disorders, dementia, memory and attention deficits, Alzheimer's disease, amyotrophic lateral sclerosis (ALS), dysmenorrhea, narcolepsy, Reynaud's disease, intermittent claudication, Sjorgren's syndrome, arrhythmia, hypertension, myotonic muscle dystrophia, spasticity, xerostomia, diabetes type II, hyperinsulinemia, premature labour, baldness, cancer, irritable bowel syndrome, immune suppression, migraine and pain.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:640251 CAPLUS
DOCUMENT NUMBER: 147:52932
TITLE: Preparation of novel pyrazines and their use for treatment of nephritis
INVENTOR(S): Fuchi, Nobuhiro; Iura, Yosuke; Kaneko, Hiroaki; Yamada, Masaki; Sekitani, Yumiko
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 69pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007145786	A	20070614	JP 2005-345710	20051130

PRIORITY APPLN. INFO.: JP 2005-345710 20051130
OTHER SOURCE(S): MARPAT 147:52932
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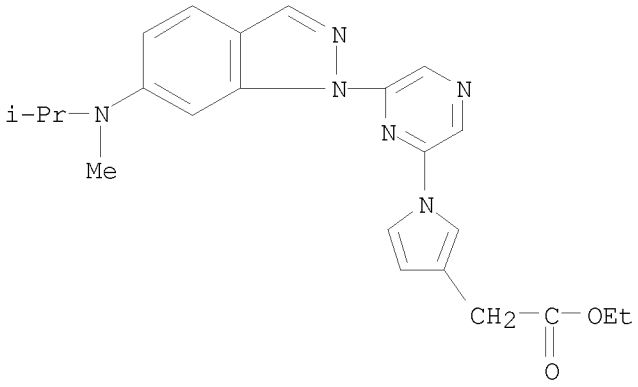
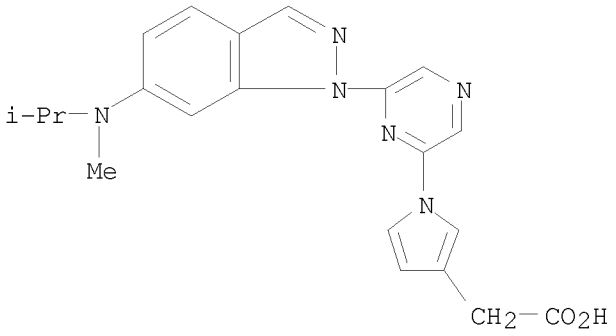
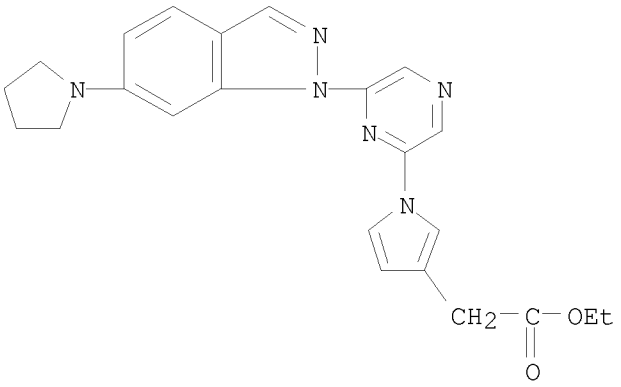
940882-82-6P 940882-83-7P 940882-84-8P
940882-85-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazines for treatment of nephritis)
RN 940881-86-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[methyl(1-methylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



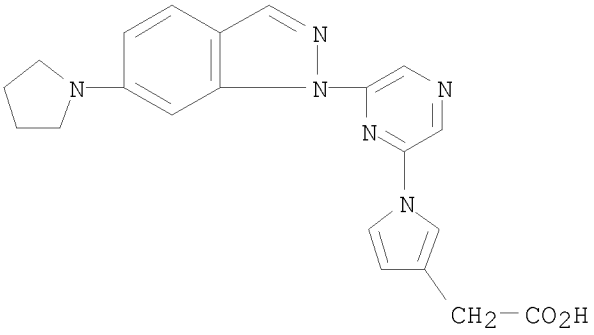
RN 940881-89-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[methyl(1-methylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



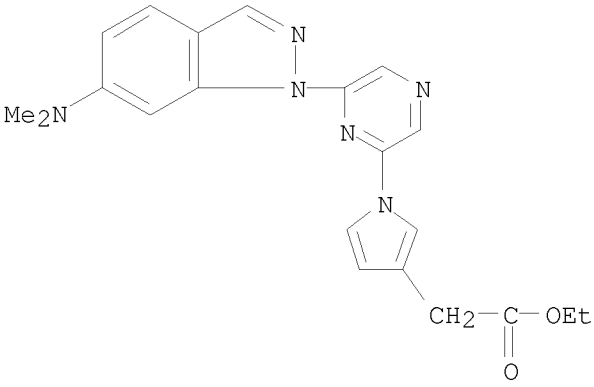
RN 940881-92-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-pyrrolidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



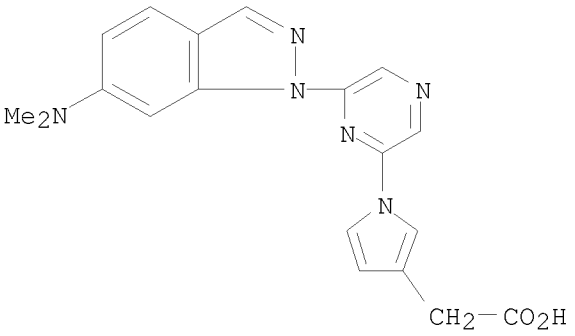
RN 940881-95-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-pyrrolidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



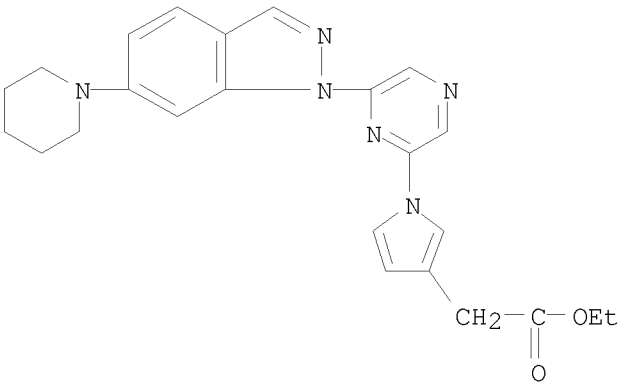
RN 940881-98-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(dimethylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



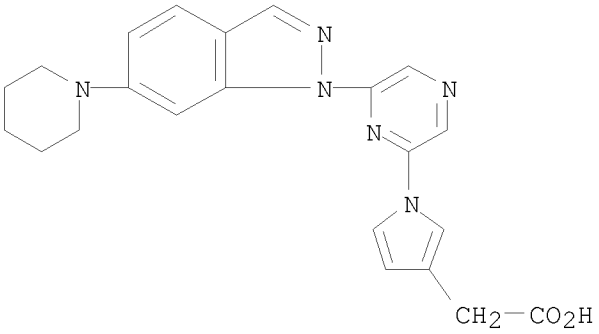
RN 940882-00-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(dimethylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-03-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

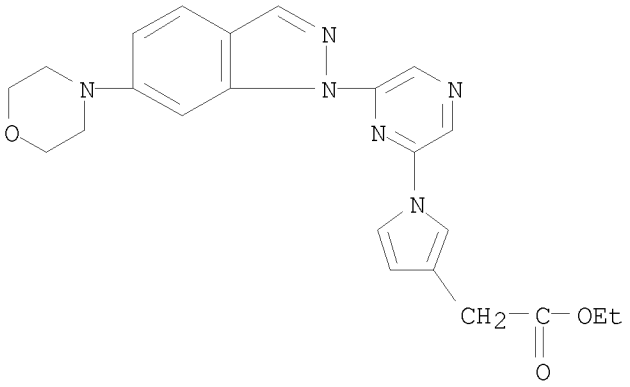


RN 940882-05-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)

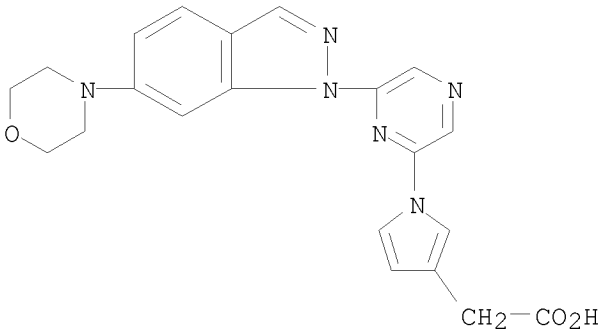


RN 940882-07-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-morpholinyl)-1H-indazol-1-yl]-2-

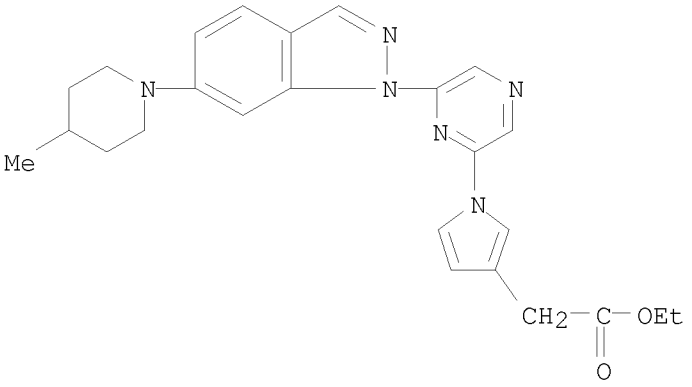
pyrazinyl]-, ethyl ester (CA INDEX NAME)



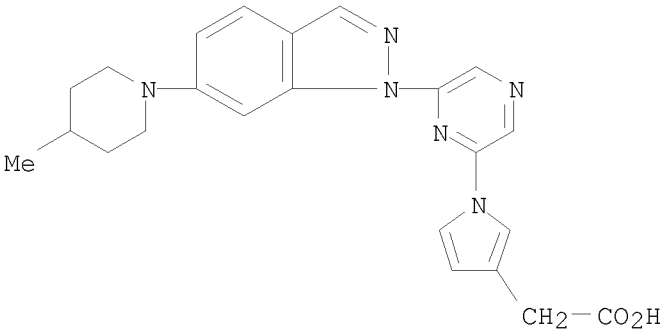
RN 940882-09-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-morpholinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



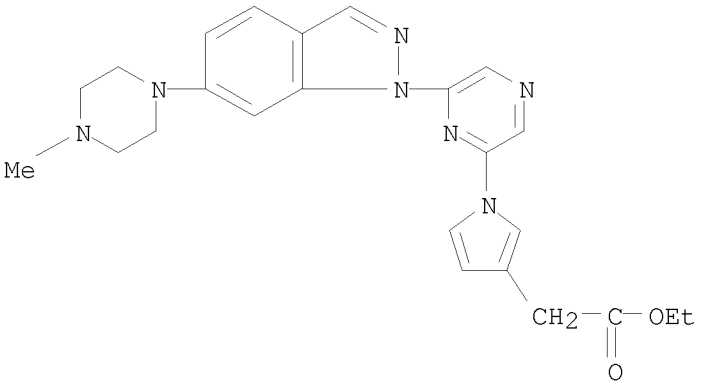
RN 940882-11-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methyl-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



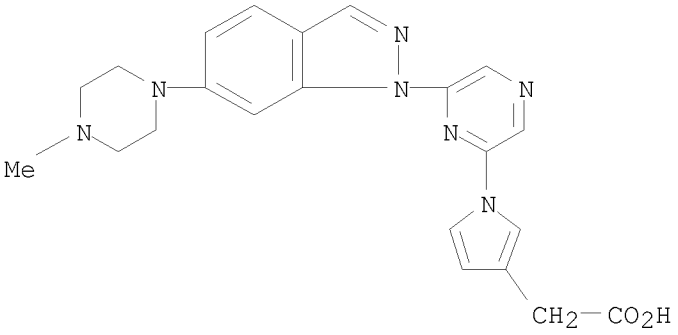
RN 940882-13-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methyl-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



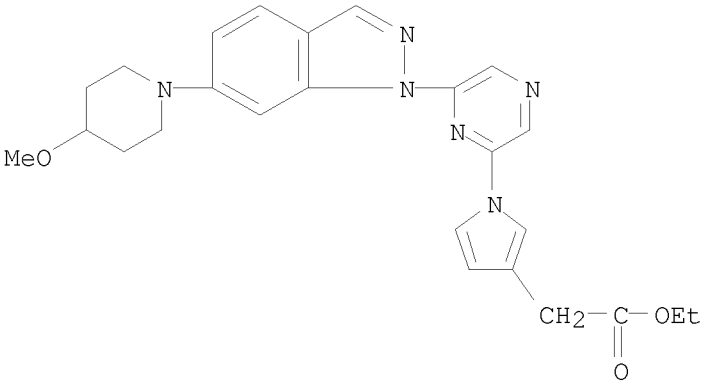
RN 940882-15-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methyl-1-piperazinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



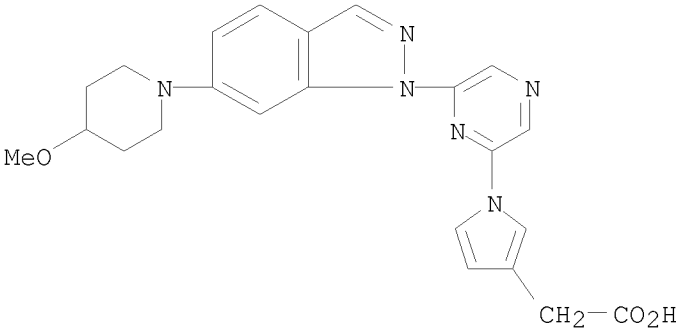
RN 940882-17-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methyl-1-piperazinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



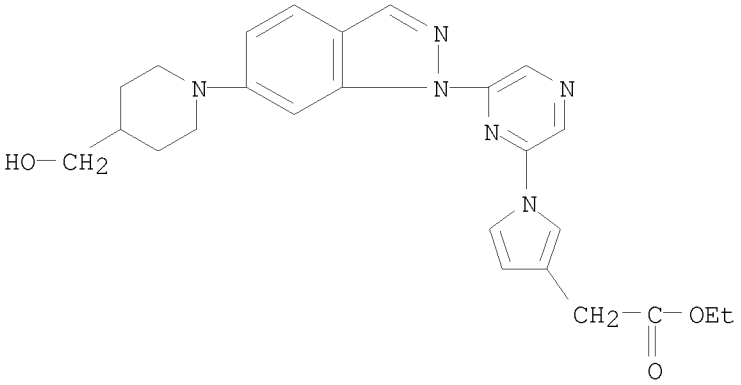
RN 940882-19-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methoxy-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



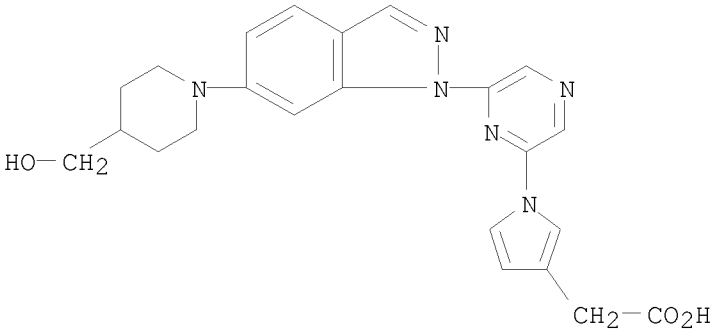
RN 940882-21-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(4-methoxy-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-23-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(hydroxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

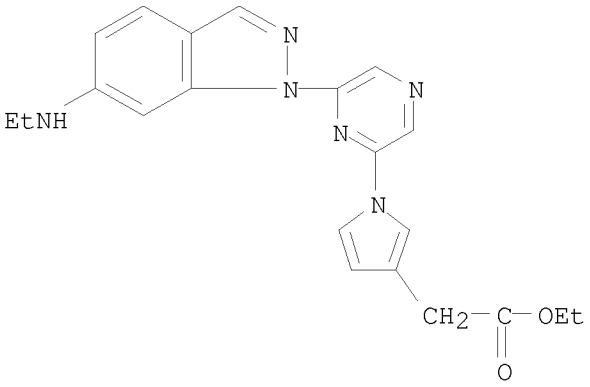


RN 940882-24-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(hydroxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)

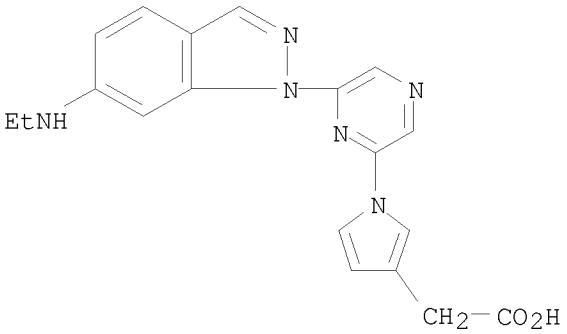


RN 940882-25-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(ethylamino)-1H-indazol-1-yl]-2-

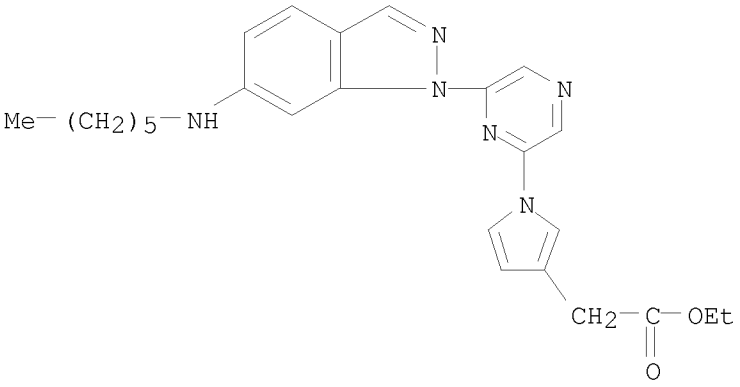
pyrazinyl]-, ethyl ester (CA INDEX NAME)



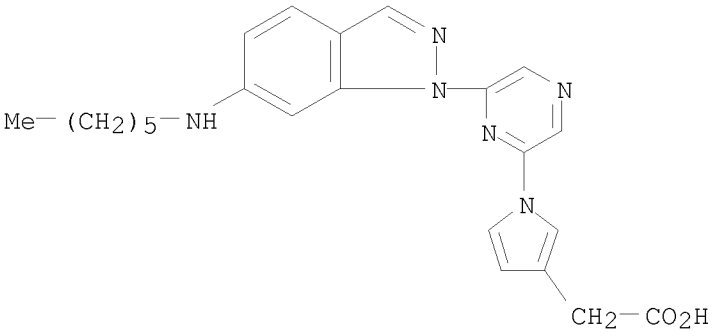
RN 940882-26-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(ethylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



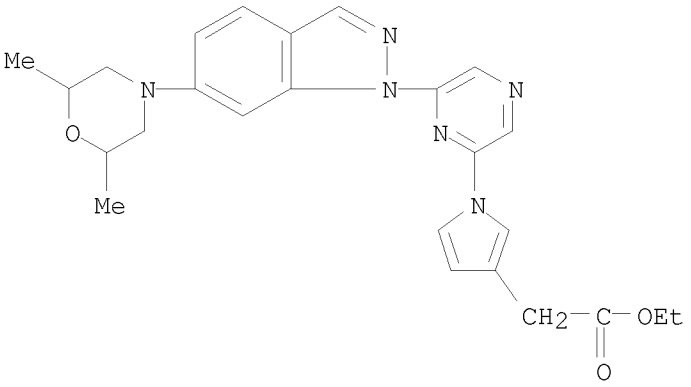
RN 940882-27-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(hexylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



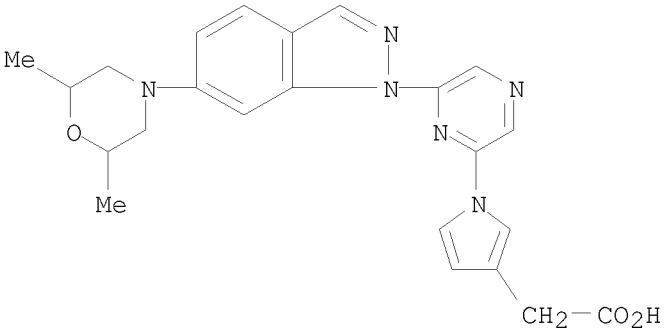
RN 940882-28-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(hexylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



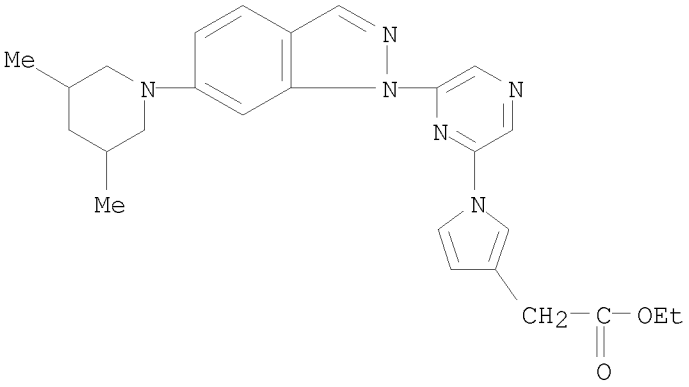
RN 940882-29-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(2,6-dimethyl-4-morpholinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



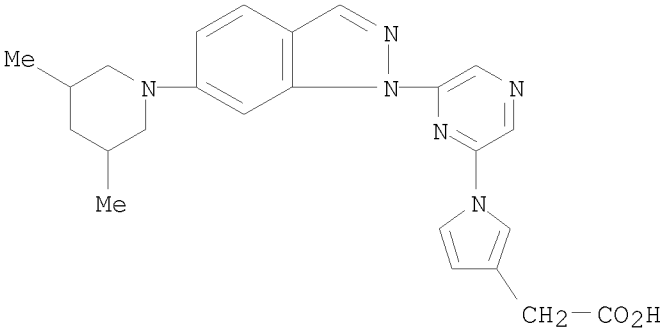
RN 940882-30-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(2,6-dimethyl-4-morpholinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



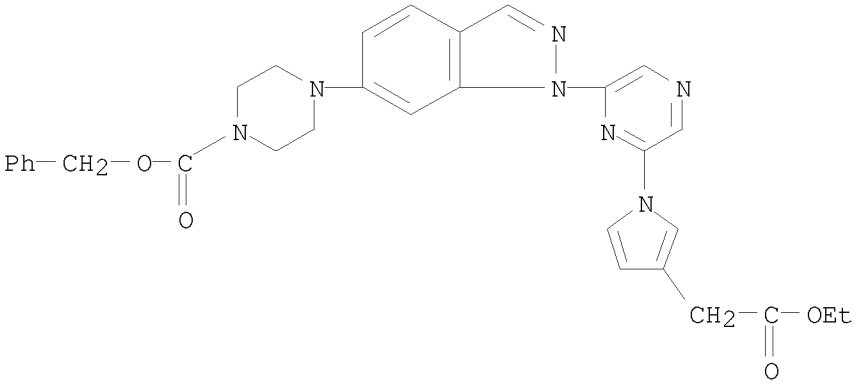
RN 940882-31-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(3,5-dimethyl-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



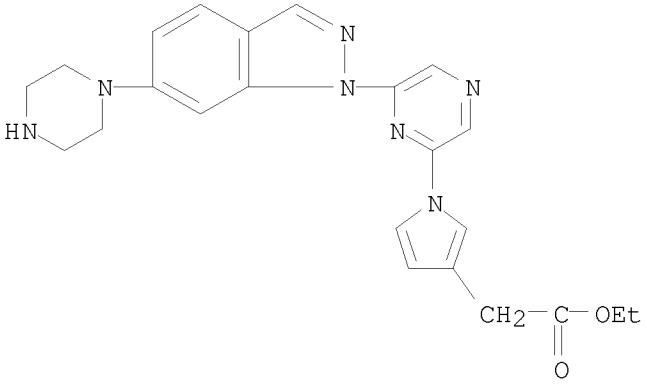
RN 940882-32-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(3,5-dimethyl-1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



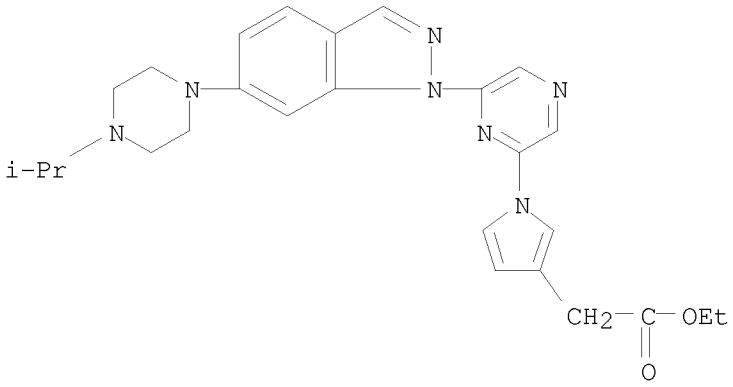
RN 940882-33-7 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[1-[6-[3-(2-ethoxy-2-oxoethyl)-1H-pyrrol-1-yl]-2-pyrazinyl]-1H-indazol-6-yl]-, phenylmethyl ester (CA INDEX NAME)



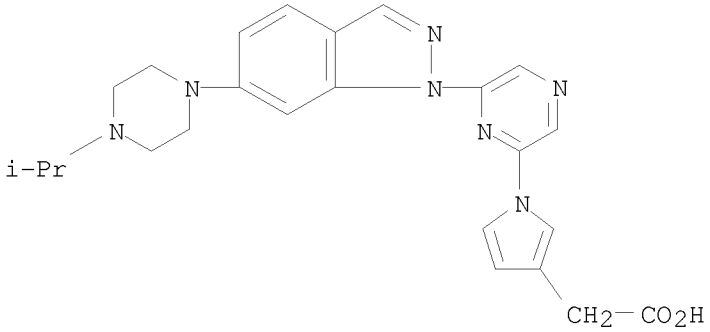
RN 940882-34-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1-piperazinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



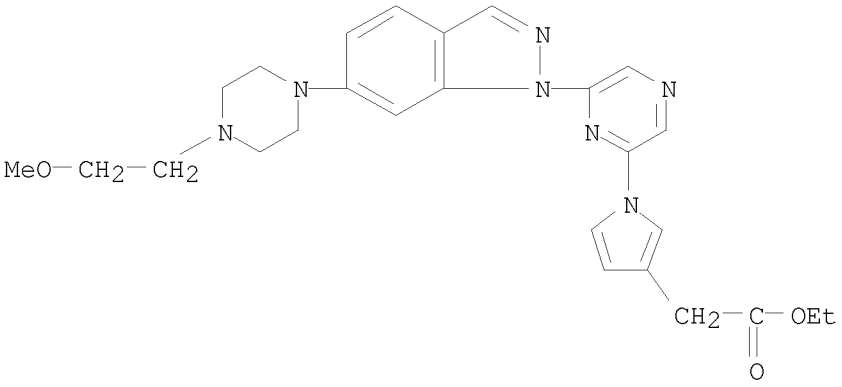
RN 940882-35-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(1-methylethyl)-1-piperazinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



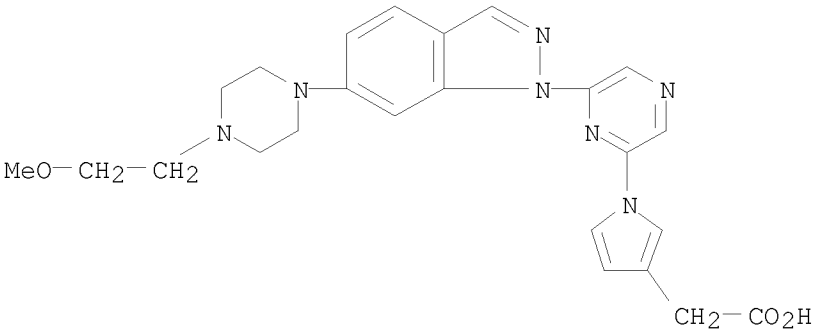
RN 940882-36-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(1-methylethyl)-1-piperazinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



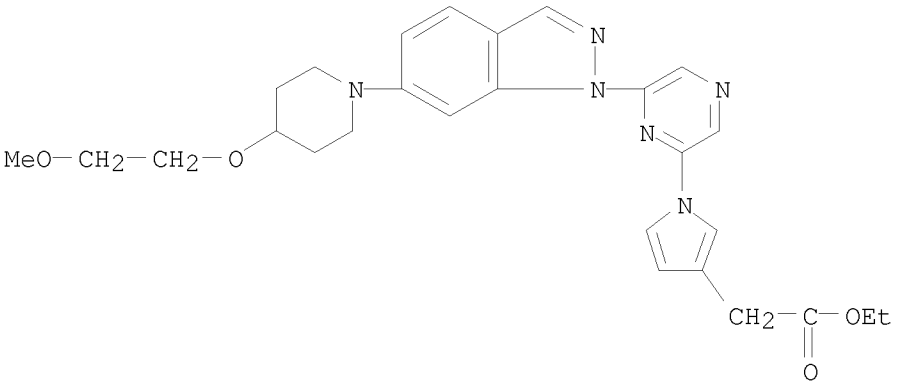
RN 940882-37-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(2-methoxyethyl)-1-piperazinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



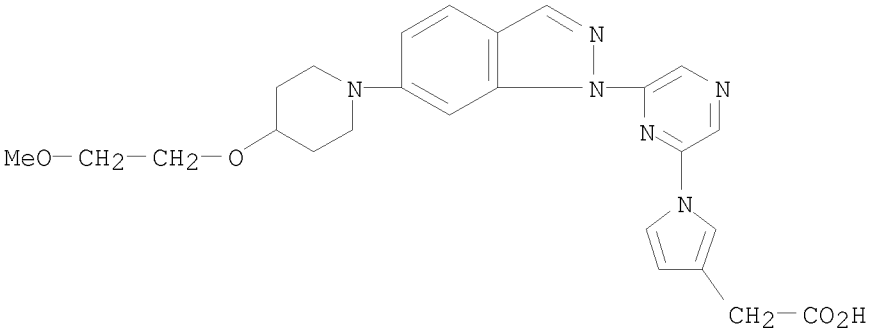
RN 940882-38-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(2-methoxyethyl)-1-piperazinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



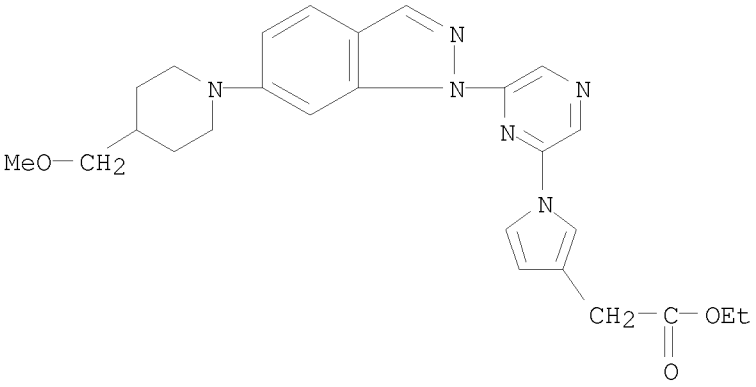
RN 940882-39-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(2-methoxyethoxy)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



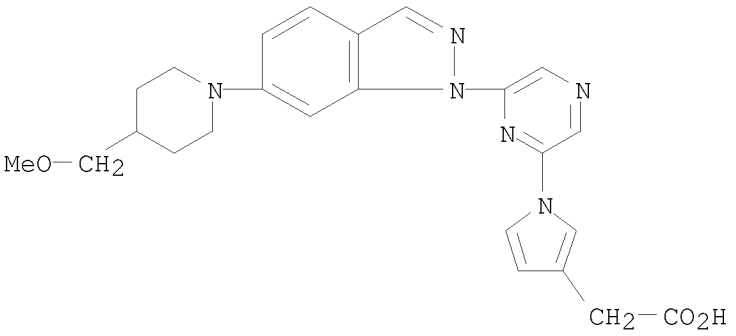
RN 940882-40-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(2-methoxyethoxy)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



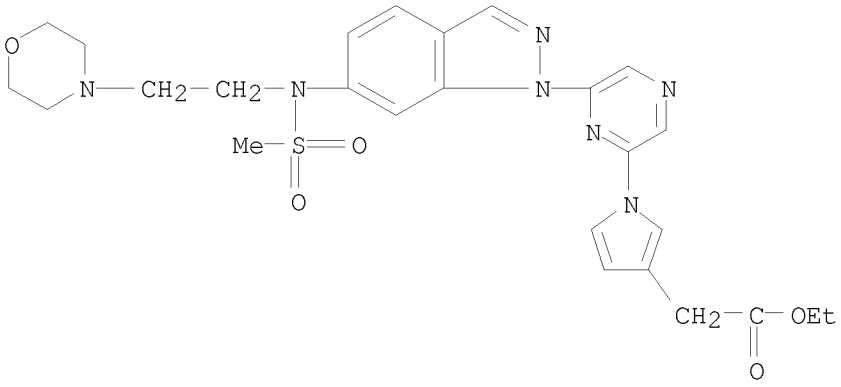
RN 940882-41-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(methoxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



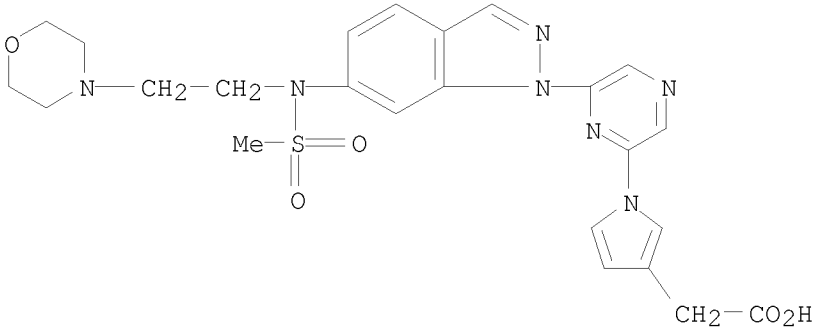
RN 940882-42-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(methoxymethyl)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-43-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)[2-(4-morpholinyl)ethyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

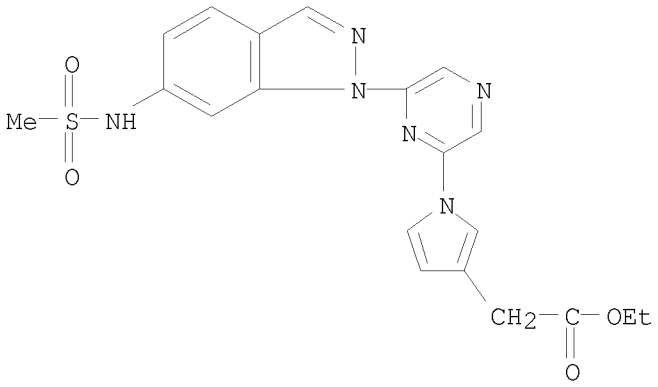


RN 940882-44-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)[2-(4-morpholinyl)ethyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)

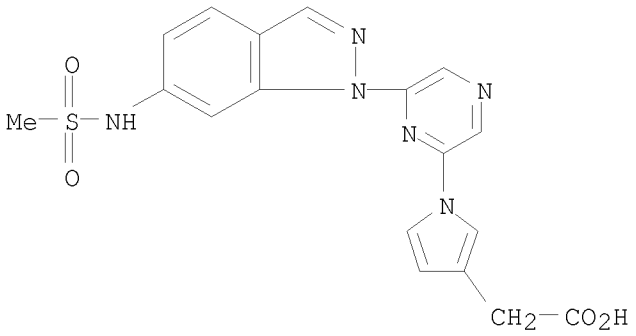


RN 940882-45-1 CAPLUS

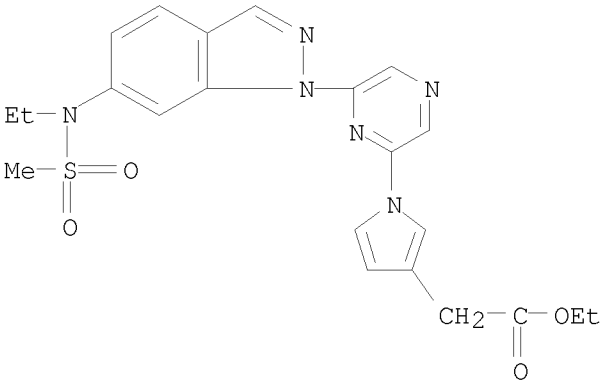
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



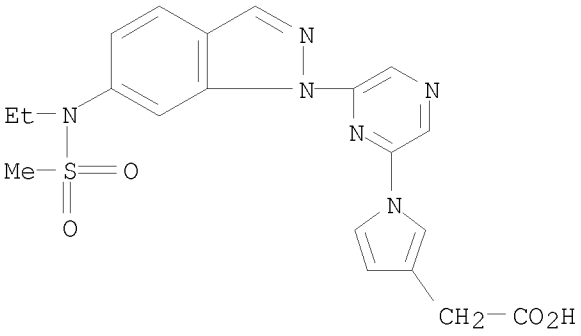
RN 940882-46-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



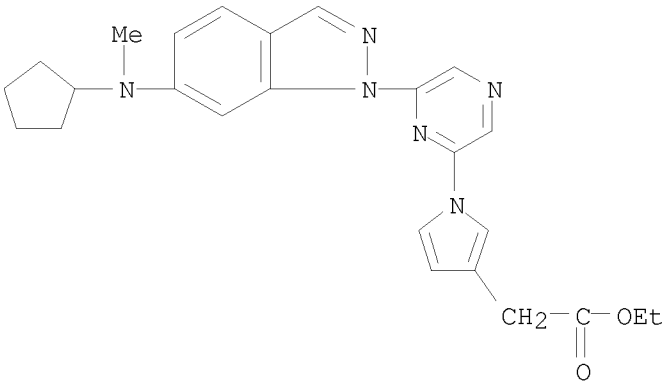
RN 940882-47-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[ethyl(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



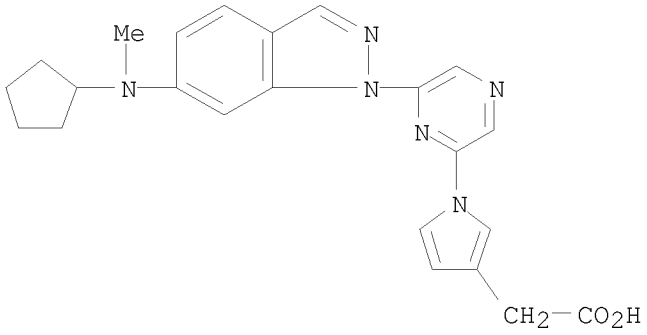
RN 940882-48-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[ethyl(methylsulfonyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



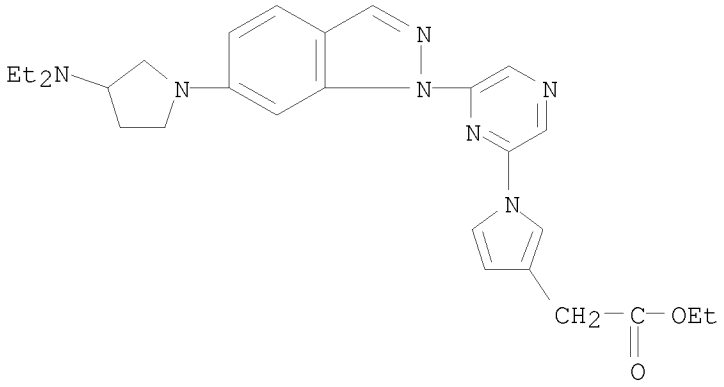
RN 940882-49-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclopentylmethylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



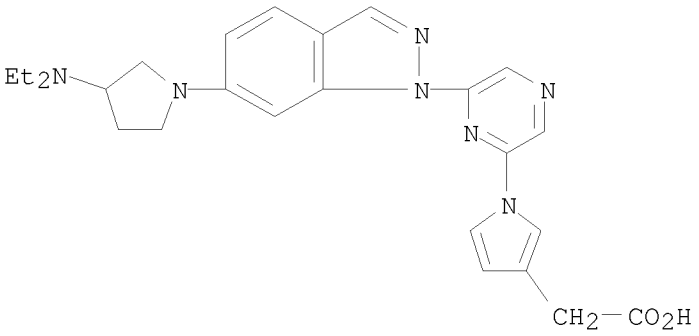
RN 940882-50-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclopentylmethylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



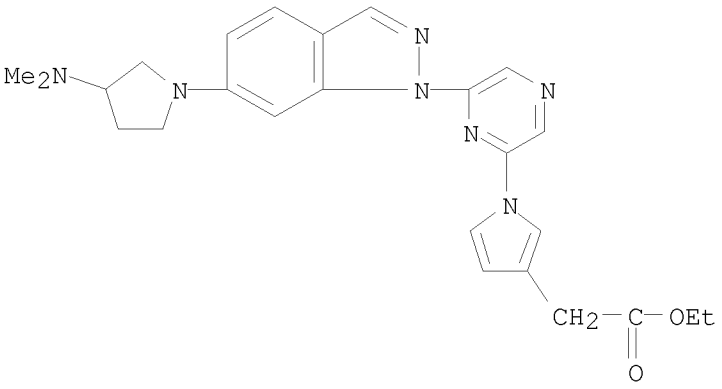
RN 940882-51-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(diethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



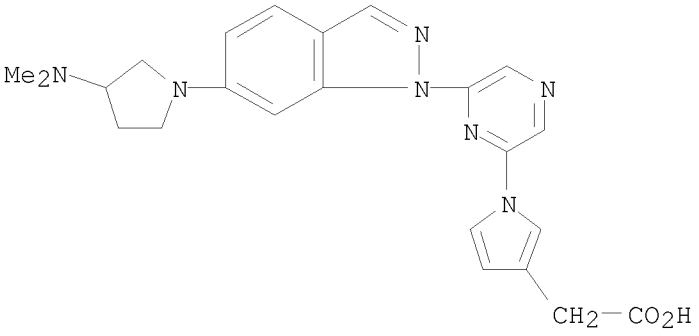
RN 940882-52-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(diethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-53-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(dimethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

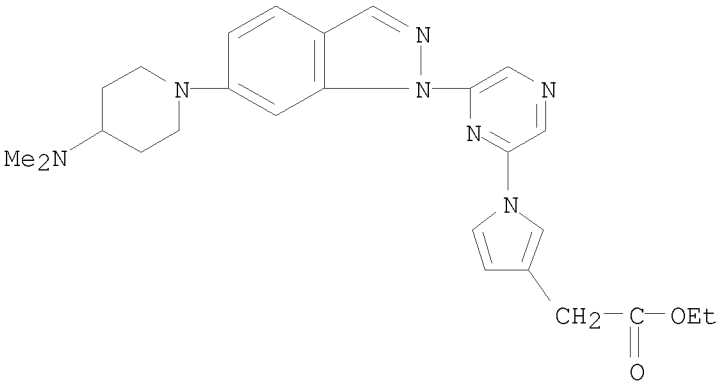


RN 940882-54-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[3-(dimethylamino)-1-pyrrolidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)

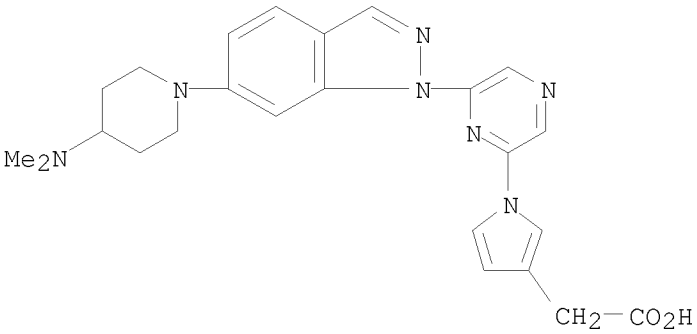


RN 940882-55-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(dimethylamino)-1-piperidinyl]-1H-

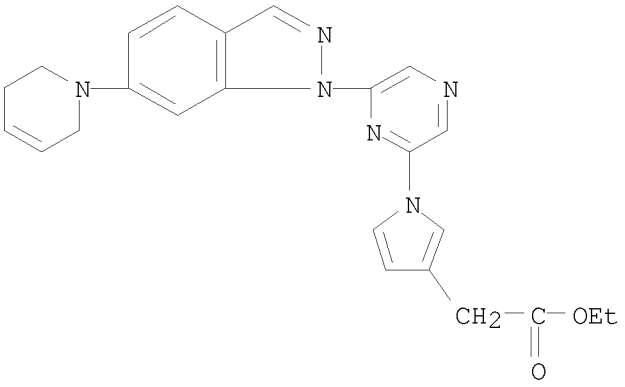
indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



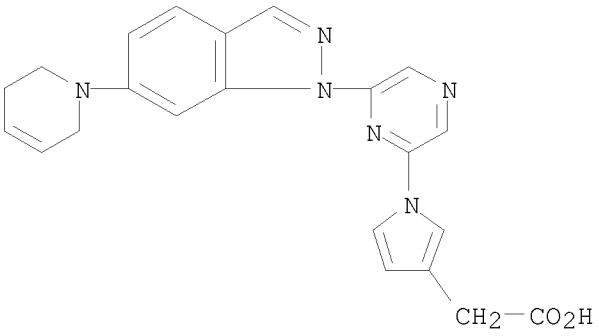
RN 940882-56-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[4-(dimethylamino)-1-piperidinyl]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



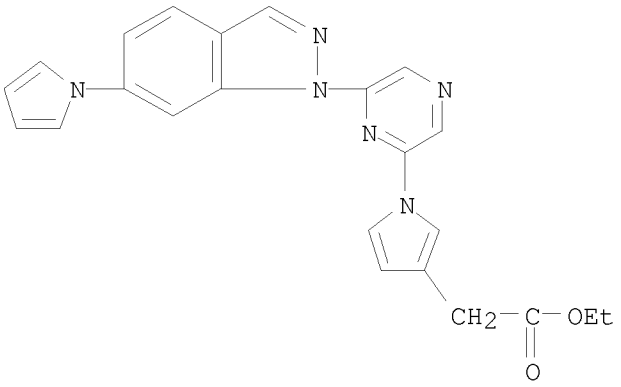
RN 940882-57-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(3,6-dihydro-1(2H)-pyridinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



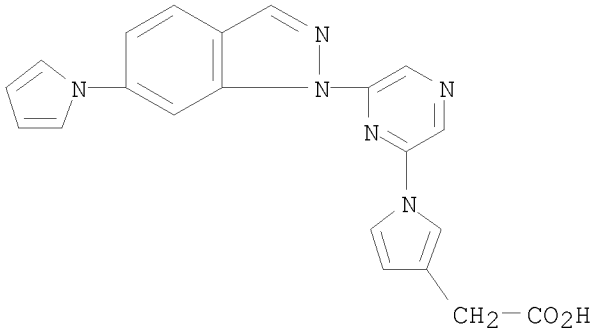
RN 940882-58-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(3,6-dihydro-1(2H)-pyridinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



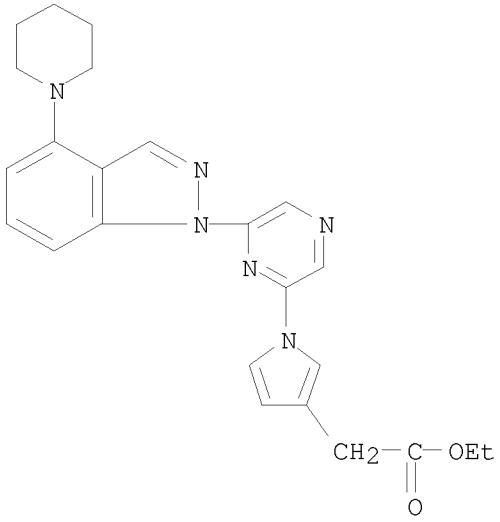
RN 940882-59-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1H-pyrrol-1-yl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



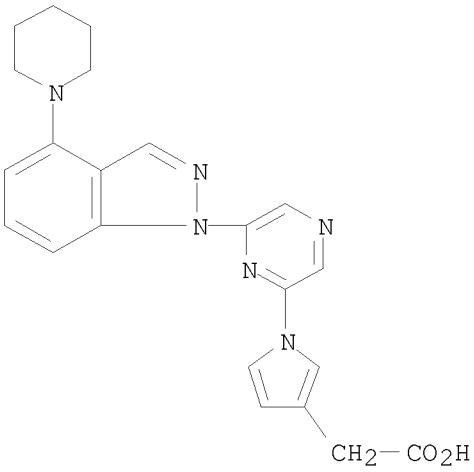
RN 940882-60-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(1H-pyrrol-1-yl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



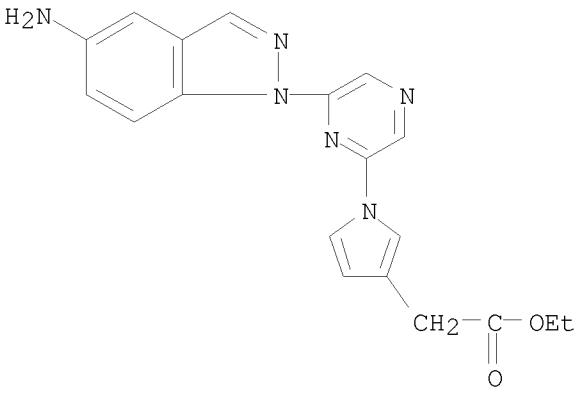
RN 940882-61-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-(1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



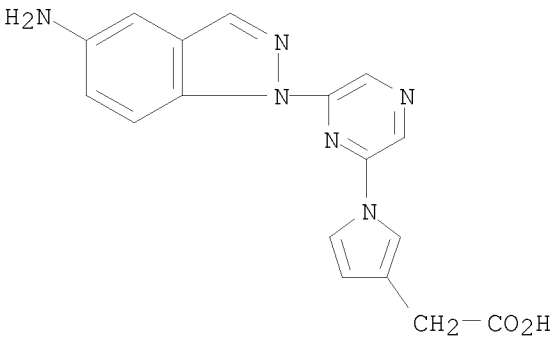
RN 940882-62-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-(1-piperidinyl)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



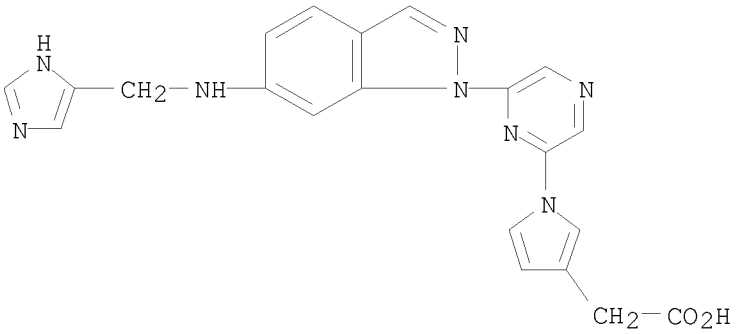
RN 940882-63-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(5-amino-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



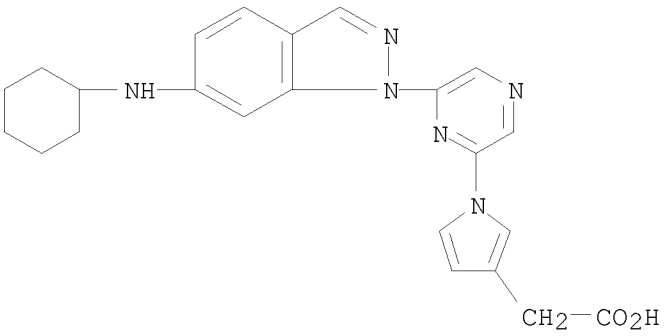
RN 940882-64-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(5-amino-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



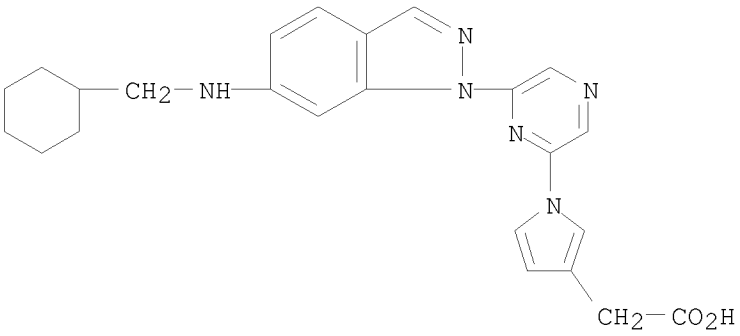
RN 940882-65-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1H-imidazol-5-ylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



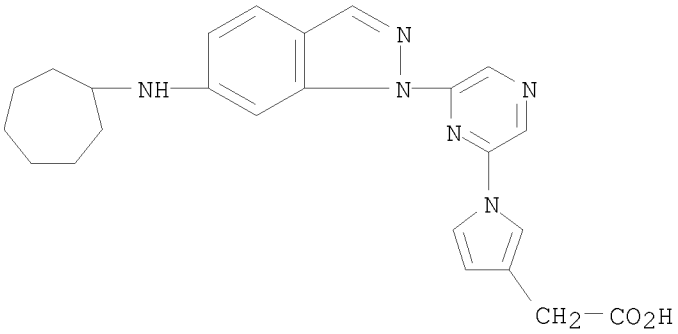
RN 940882-66-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclohexylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



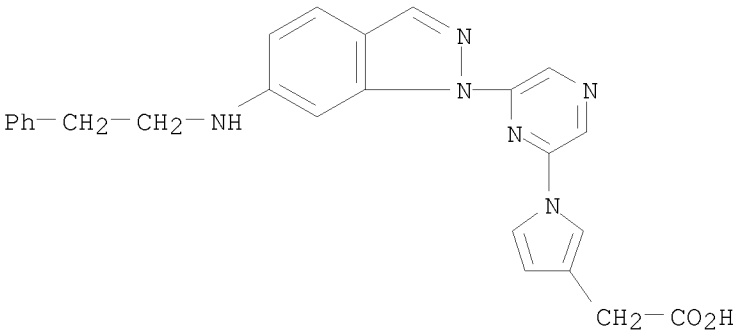
RN 940882-67-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(cyclohexylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



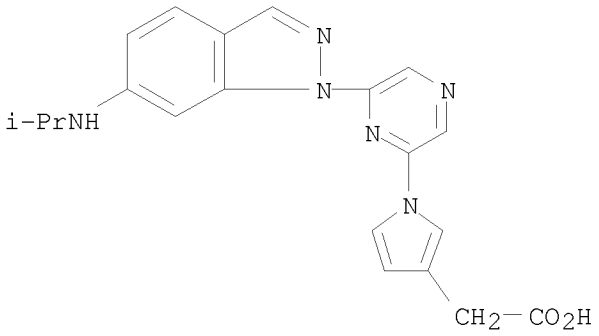
RN 940882-68-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cycloheptylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



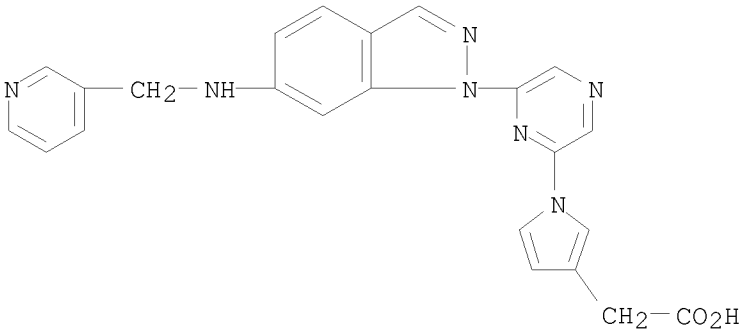
RN 940882-69-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(2-phenylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



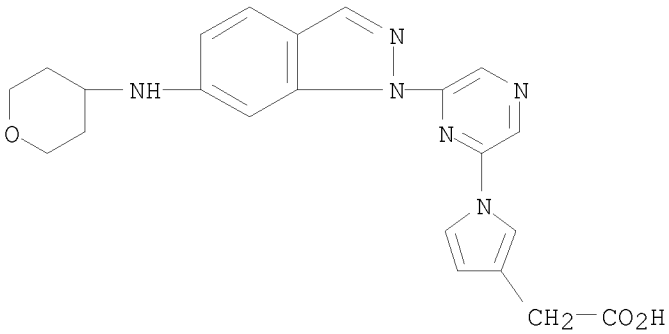
RN 940882-70-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1-methylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



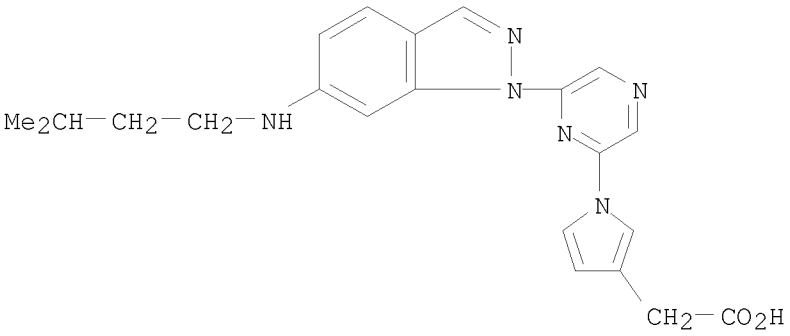
RN 940882-71-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(3-pyridinylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



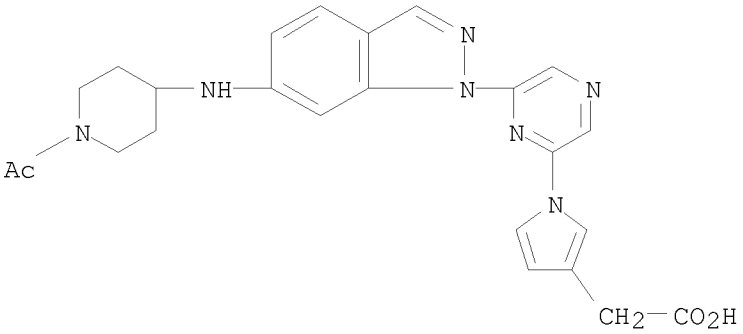
RN 940882-72-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(tetrahydro-2H-pyran-4-yl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



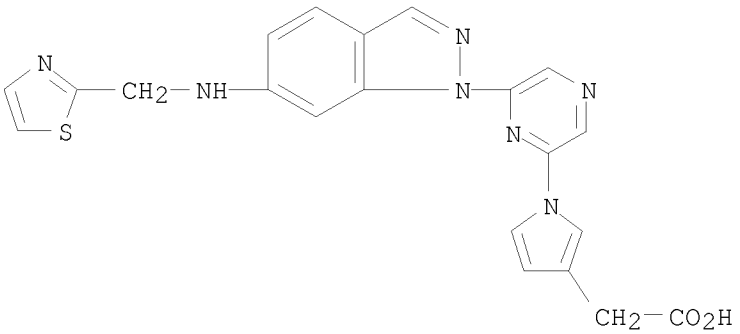
RN 940882-73-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(3-methylbutyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



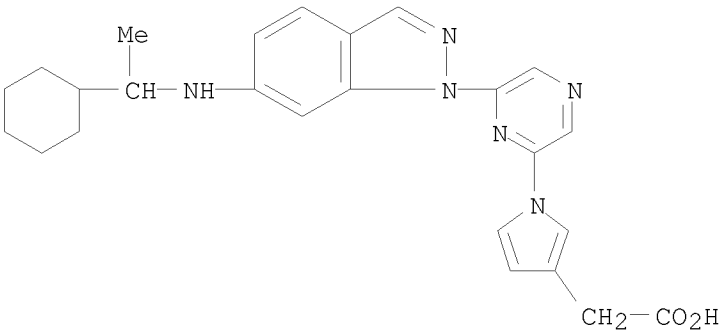
RN 940882-74-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1-acetyl-4-piperidinyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



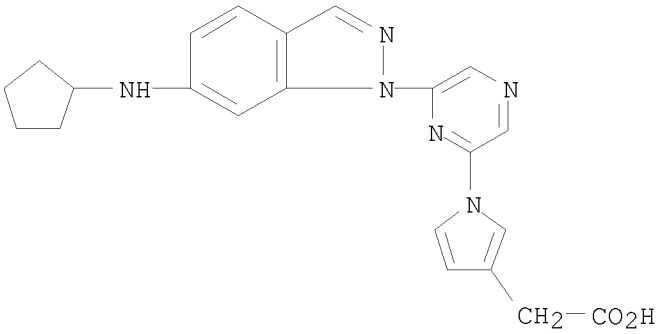
RN 940882-75-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(2-thiazolylmethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



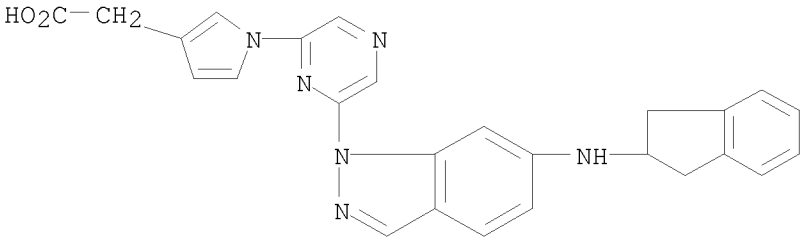
RN 940882-76-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(1-cyclohexylethyl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



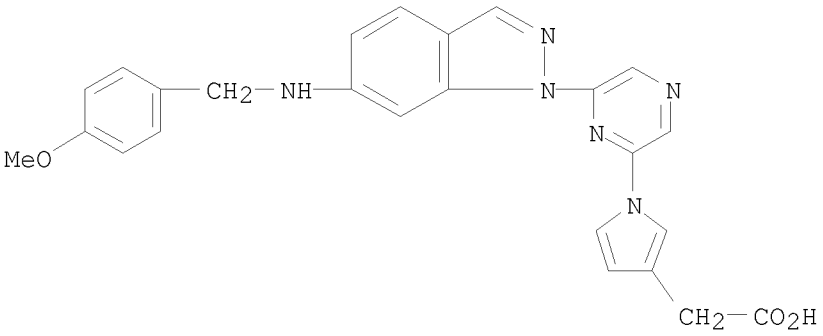
RN 940882-77-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(cyclopentylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



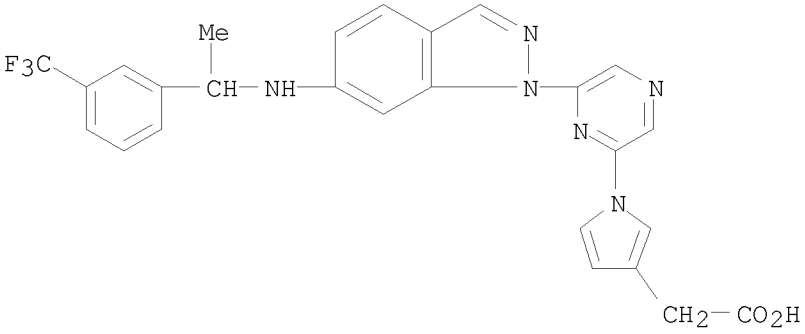
RN 940882-78-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(2,3-dihydro-1H-inden-2-yl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



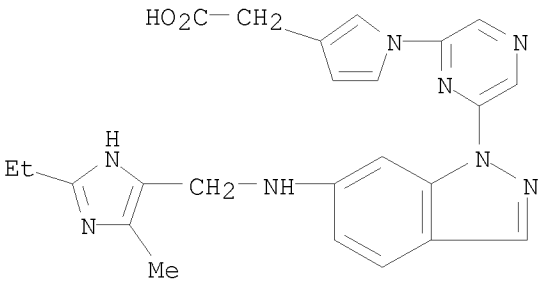
RN 940882-79-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[(4-methoxyphenyl)methyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



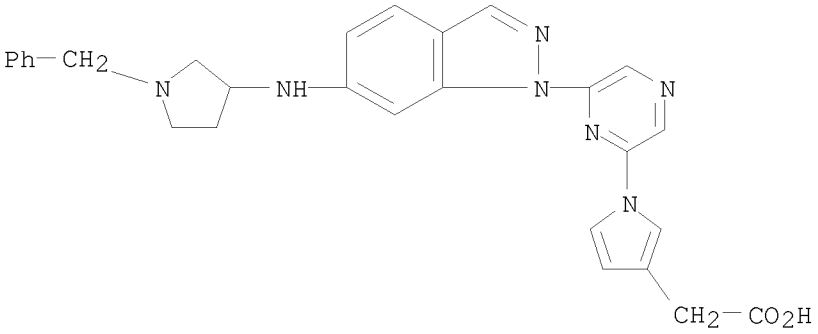
RN 940882-80-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[1-[3-(trifluoromethyl)phenyl]ethyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



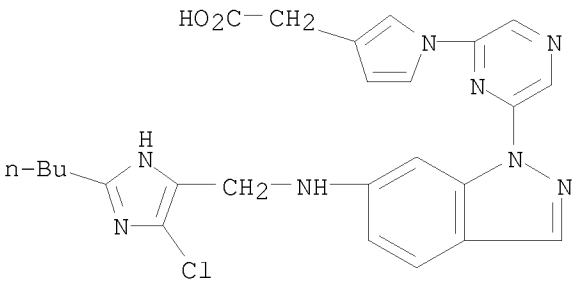
RN 940882-81-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[(2-ethyl-4-methyl-1H-imidazol-5-yl)methyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



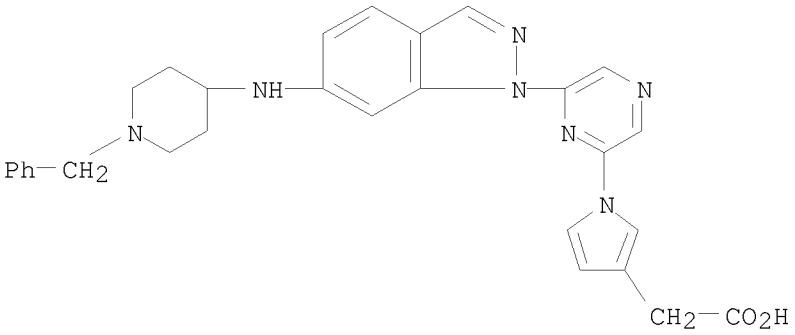
RN 940882-82-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[1-(phenylmethyl)-3-pyrrolidinyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



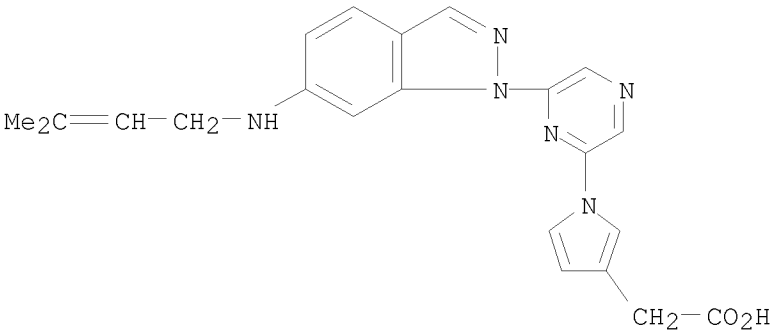
RN 940882-83-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[(2-butyl-5-chloro-1H-imidazol-4-yl)methyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-84-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[[1-(phenylmethyl)-4-piperidinyl]amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 940882-85-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-[(3-methyl-2-buten-1-yl)amino]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



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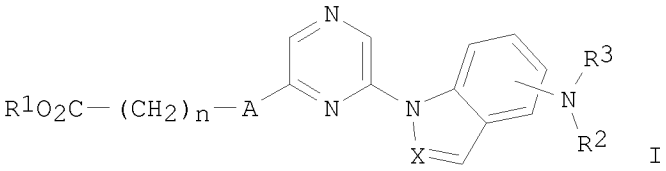
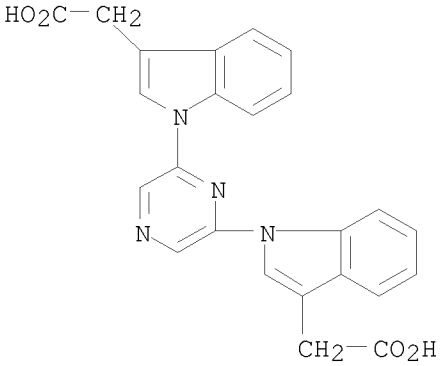


AB Title compds. I [n = 0-2; R1 = H, C1-4 linear alkyl; A = (C1-4 linear alkyl-substituted) indolediyl, pyrrolediyl, furandiyl, thiophenediyl, pyrazolediyl, imidazolediyl, etc.; X = N, CH; R2, R3 = H, C1-8 linear alkyl, (un)substituted C3-8 branched or cyclic alkyl, COR4, SO2R4; R4 = H, C1-3 linear alkyl, C3-5 branched alkyl, Ph; R2 = R3 ≠ H; R2NR3 may form (un)saturated (un)substituted 5- to 6-membered heterocyclyl] are prepared Thus, Et 2-[1-(6-iodopyrazin-2-yl)pyrrol-3-yl]acetate was reacted with 6-(piperidin-1-yl)-1H-indazole to give Et 2-[1-[6-[6-(piperidin-1-yl)-1H-indazol-1-yl]pyrazin-2-yl]-1H-pyrrol-3-yl]acetate, which was hydrolyzed to afford the corresponding carboxylic acid. The product inhibited PDGF-stimulated mesangial cell proliferation with IC50 value of 2.0 μM.

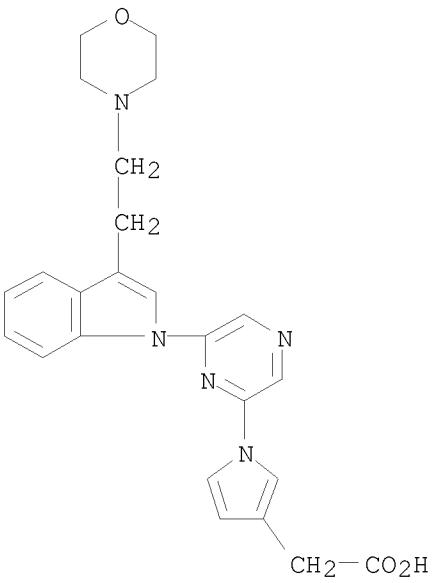
L4 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:144145 CAPLUS
DOCUMENT NUMBER: 144:212807
TITLE: Preparation of pyrazines, medicines containing them, and their pharmaceutical use for treatment of nephritis
INVENTOR(S): Takahashi, Toshiya; Fuchi, Nobuhiro; Yamada, Masaki; Nitta, Aiko
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 83 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006045119	A	20060216	JP 2004-228530	20040804

PRIORITY APPLN. INFO.: JP 2004-228530 20040804
OTHER SOURCE(S): MARPAT 144:212807
IT 875899-98-2P 875900-18-8P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazines for treatment of nephritis)
RN 875899-98-2 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-[3-(carboxymethyl)-1H-indol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



RN 875900-18-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)ethyl]-1H-indol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



IT 875899-97-1P 875900-00-8P 875900-02-0P
875900-04-2P 875900-06-4P 875900-11-1P
875900-13-3P 875900-17-7P 875900-20-2P
875900-22-4P 875900-24-6P 875900-26-8P
875900-29-1P 875900-31-5P 875900-32-6P
875900-34-8P 875900-36-0P 875900-38-2P
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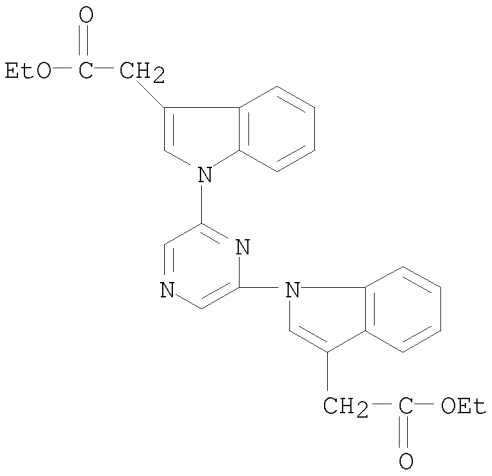
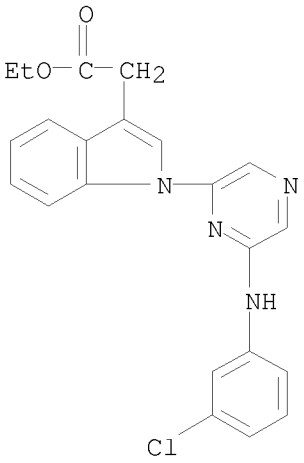
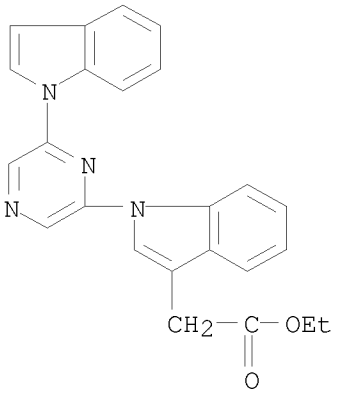
875900-70-2P 875900-72-4P 875900-74-6P
875900-76-8P 875900-78-0P 875900-80-4P
875900-82-6P 875900-84-8P 875900-86-0P
875900-88-2P 875900-90-6P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of pyrazines for treatment of nephritis)
RN 875899-97-1 CAPLUS
CN 1H-Indole-3-acetic acid, 1,1'-(2,6-pyrazinediyl)bis-, diethyl ester (9CI) (CA INDEX NAME)



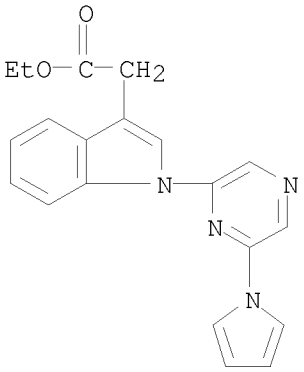
RN 875900-00-8 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-[(3-chlorophenyl)amino]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



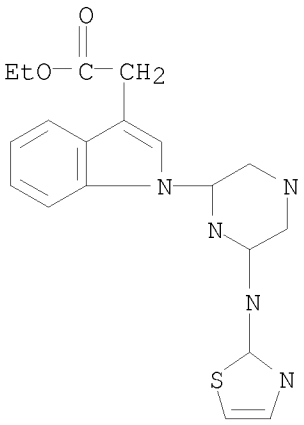
RN 875900-02-0 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



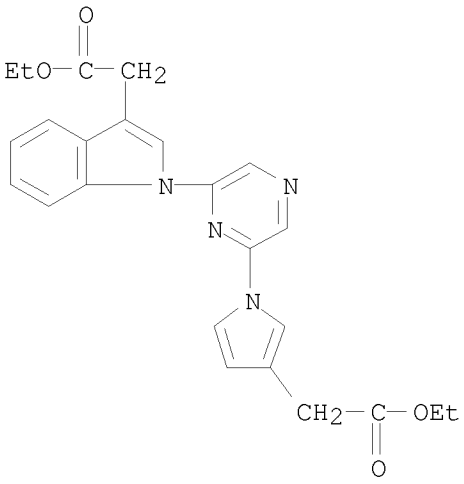
RN 875900-04-2 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-(1H-pyrrol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



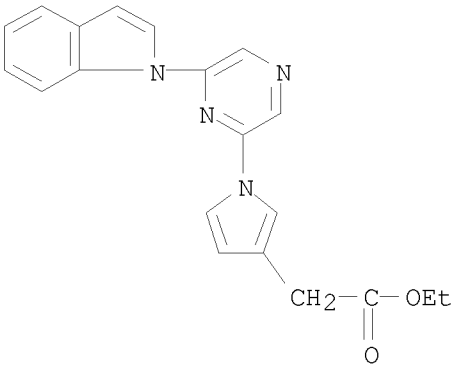
RN 875900-06-4 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-(2-thiazolylamino)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



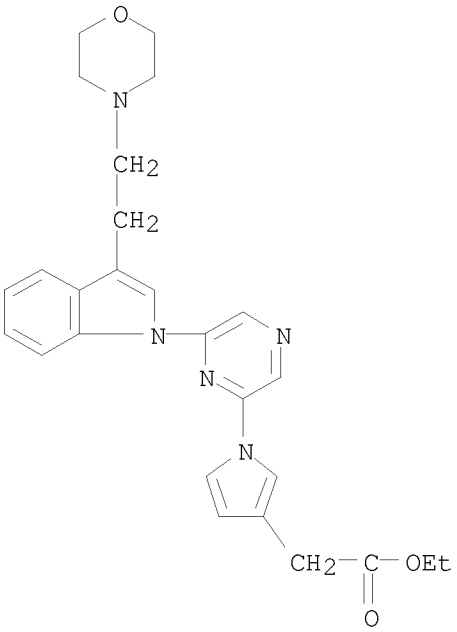
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 875900-11-1 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-[3-(2-ethoxy-2-oxoethyl)-1H-pyrrol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



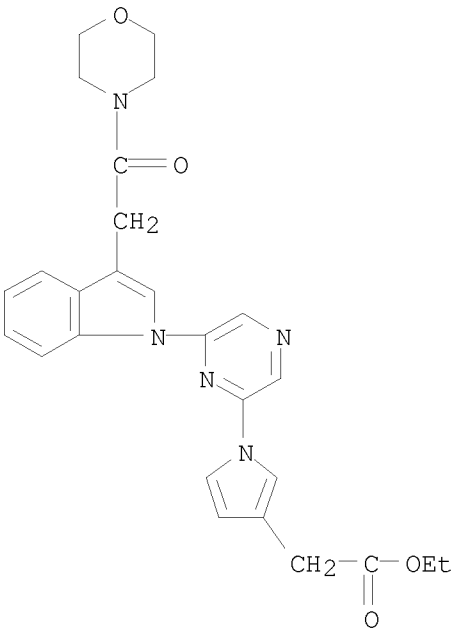
RN 875900-13-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



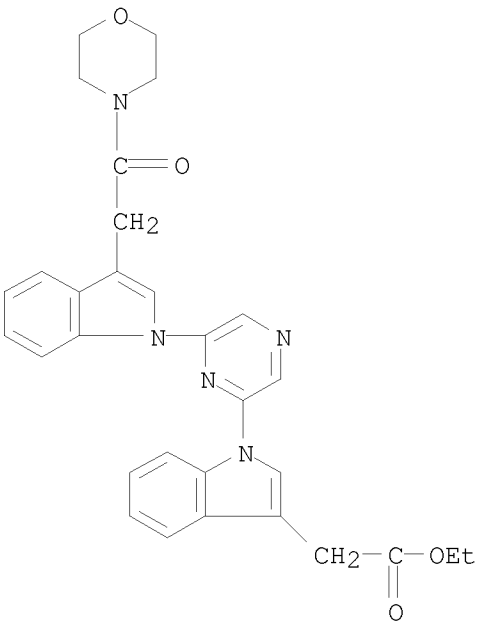
RN 875900-17-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)ethyl]-1H-indol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



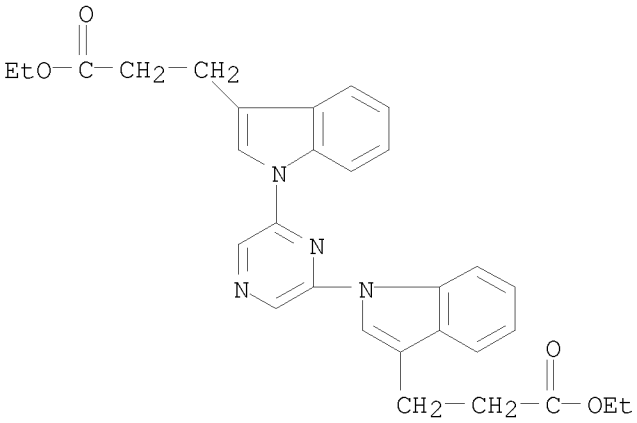
RN 875900-20-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)-2-oxoethyl]-1H-indol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 875900-22-4 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)-2-oxoethyl]-1H-indol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 875900-24-6 CAPLUS
CN 1H-Indole-3-propanoic acid, 1,1'-(2,6-pyrazinediyl)bis-, diethyl ester (9CI) (CA INDEX NAME)



RN 875900-26-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-[2-(4-morpholinyl)ethoxy]-1H-indol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

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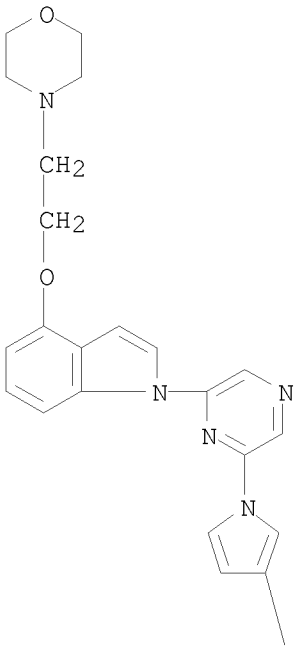

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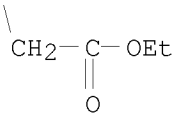
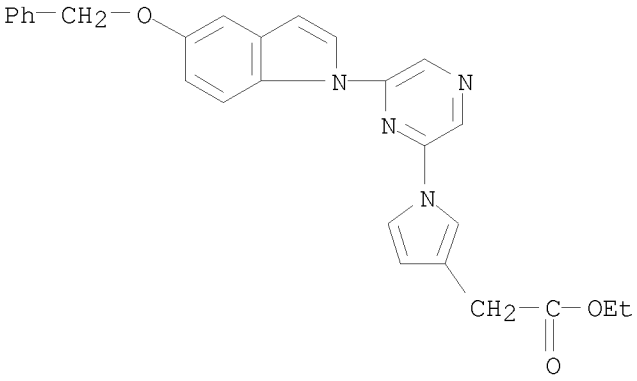


RN 875900-29-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[5-(phenylmethoxy)-1H-indol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 875900-31-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[2-[1-[6-[3-(2-ethoxy-2-oxoethyl)-1H-pyrrol-1-yl]-2-pyrazinyl]-1H-indol-3-yl]ethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

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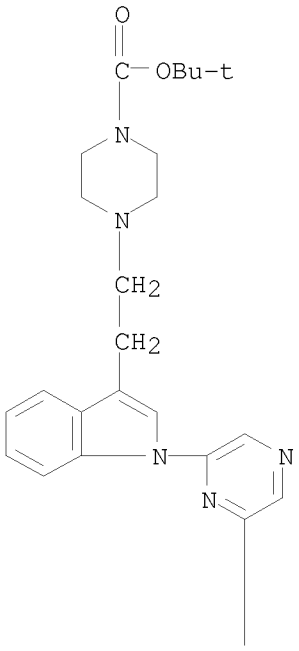

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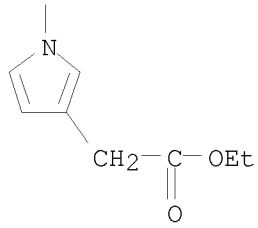

RN 875900-32-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[2-[1-[6-[3-(carboxymethyl)-1H-pyrrol-1-yl]-2-pyrazinyl]-1H-indol-3-yl]ethyl]-, 1-(1,1-dimethylethyl) ester (CA INDEX NAME)

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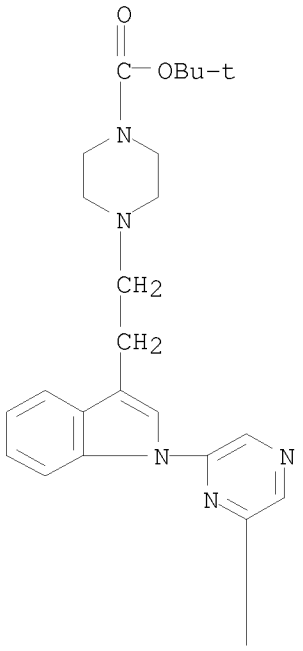

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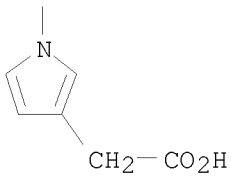
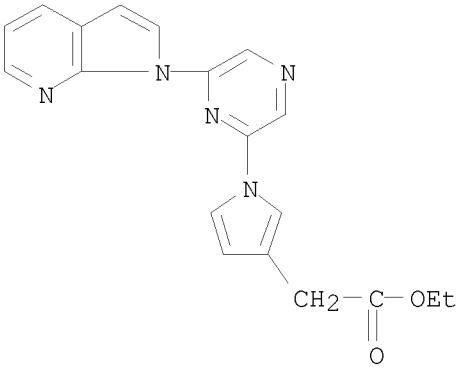
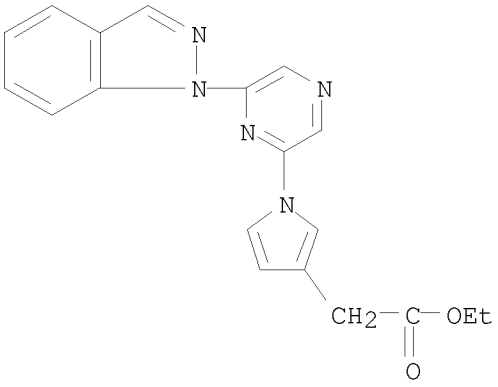


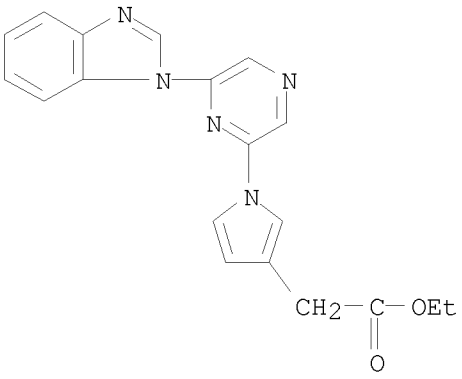
RN 875900-34-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-pyrrolo[2,3-b]pyridin-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



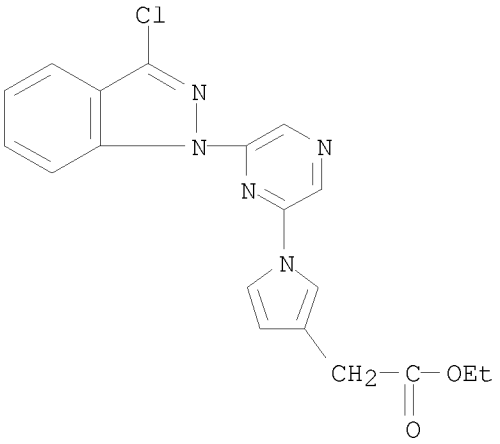
RN 875900-36-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



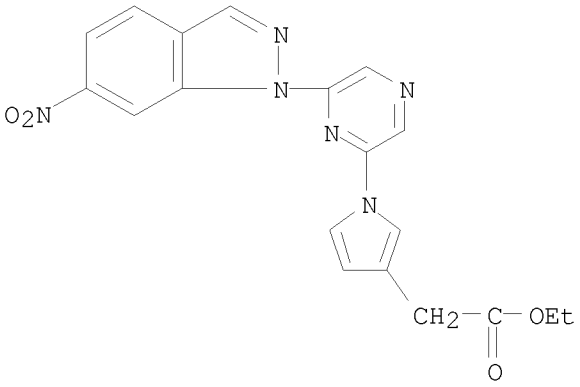
RN 875900-38-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-benzimidazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



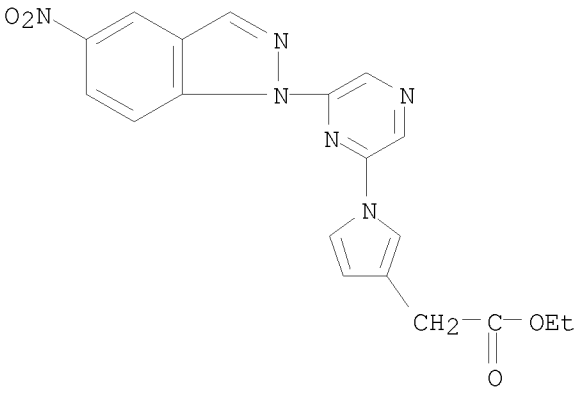
RN 875900-40-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-chloro-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 875900-42-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(6-nitro-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 875900-68-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(5-nitro-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 875900-70-2 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-[2-(4-morpholinyl)ethoxy]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

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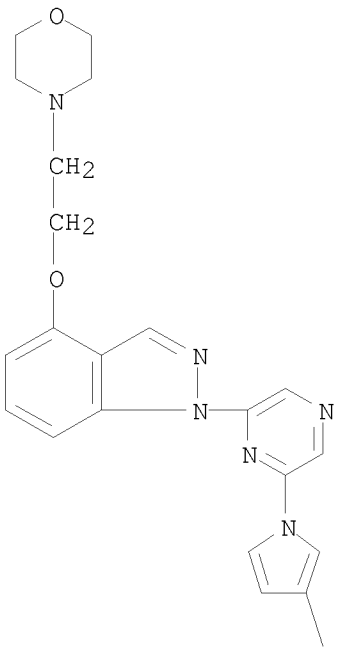

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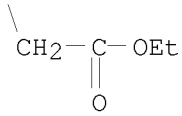

RN 875900-72-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)ethoxy]-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

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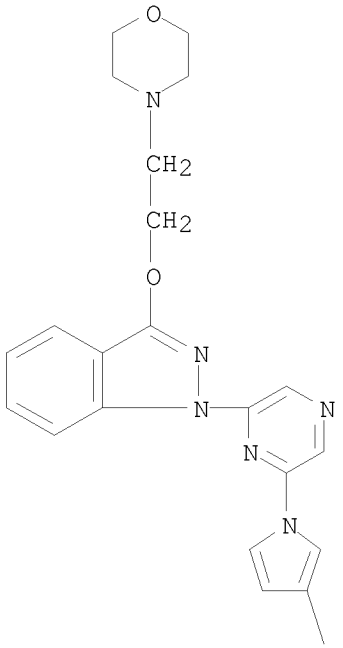

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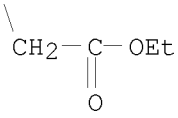
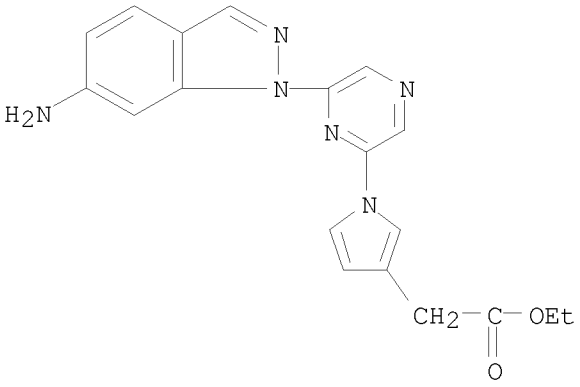
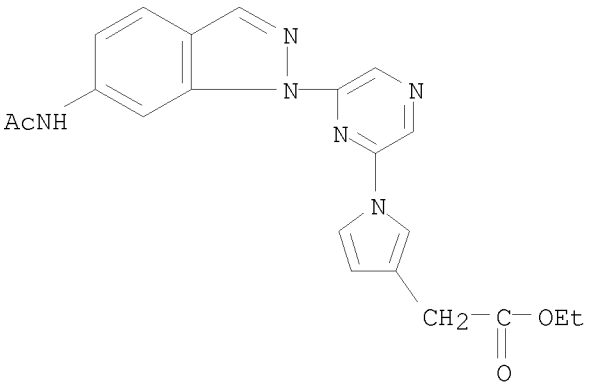


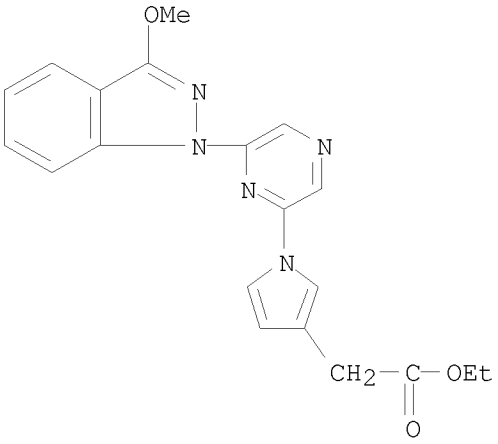
RN 875900-74-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(6-amino-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



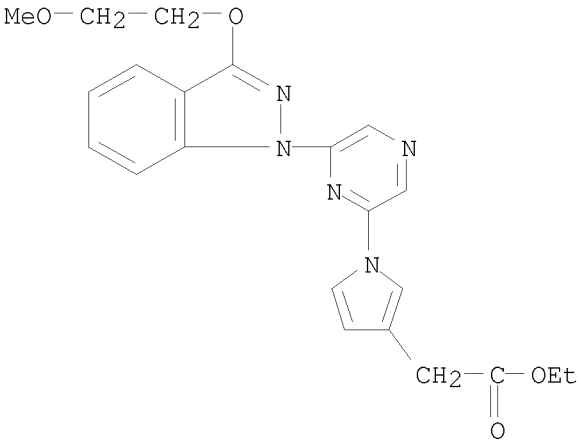
RN 875900-76-8 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(acetylamino)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



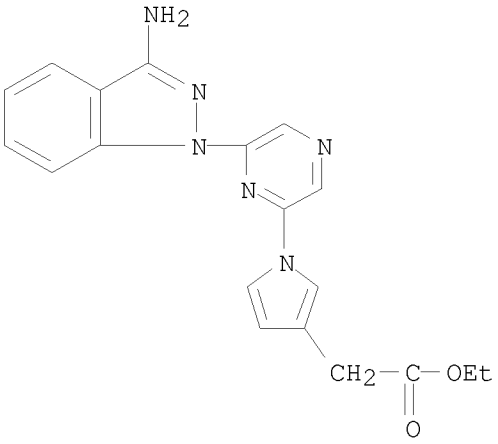
RN 875900-78-0 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-methoxy-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



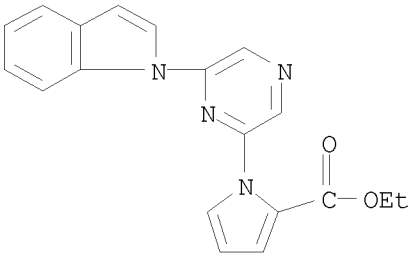
RN 875900-80-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-(2-methoxyethoxy)-1H-indazol-1-yl]-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



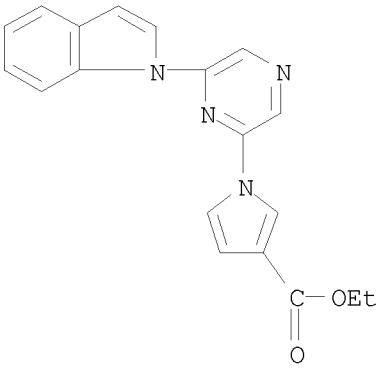
RN 875900-82-6 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-amino-1H-indazol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



RN 875900-84-8 CAPLUS
CN 1H-Pyrrole-2-carboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

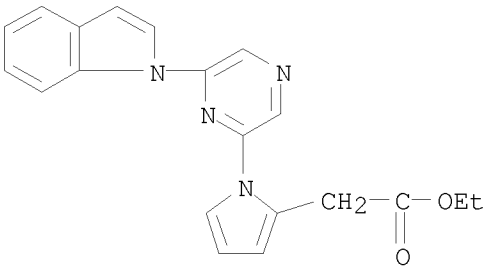


RN 875900-86-0 CAPLUS
CN 1H-Pyrrole-3-carboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)

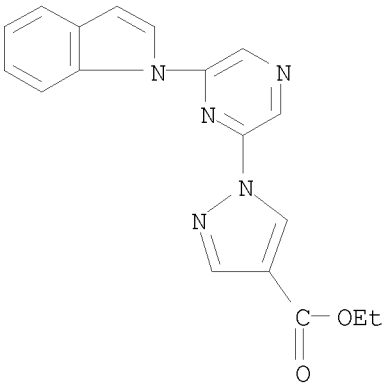


RN 875900-88-2 CAPLUS
CN 1H-Pyrrole-2-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]-, ethyl ester

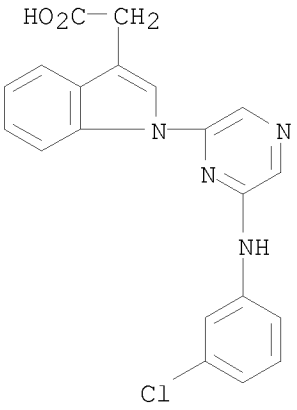
(CA INDEX NAME)



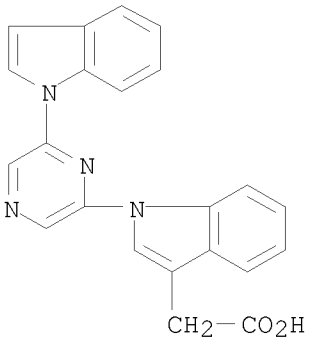
RN 875900-90-6 CAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]-, ethyl ester (CA INDEX NAME)



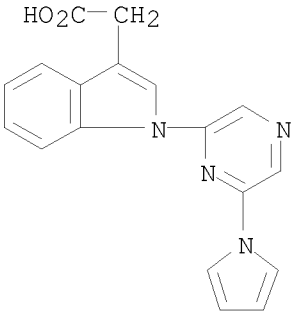
IT 875900-01-9P 875900-03-1P 875900-05-3P
875900-07-5P 875900-12-2P 875900-14-4P
875900-21-3P 875900-23-5P 875900-25-7P
875900-27-9P 875900-30-4P 875900-33-7P
875900-35-9P 875900-37-1P 875900-39-3P
875900-41-7P 875900-43-9P 875900-69-9P
875900-71-3P 875900-73-5P 875900-75-7P
875900-77-9P 875900-79-1P 875900-81-5P
875900-83-7P 875900-85-9P 875900-87-1P
875900-89-3P 875900-91-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazines for treatment of nephritis)
RN 875900-01-9 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-[(3-chlorophenyl)amino]-2-pyrazinyl]- (CA INDEX NAME)



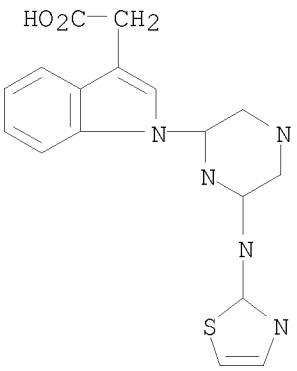
RN 875900-03-1 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



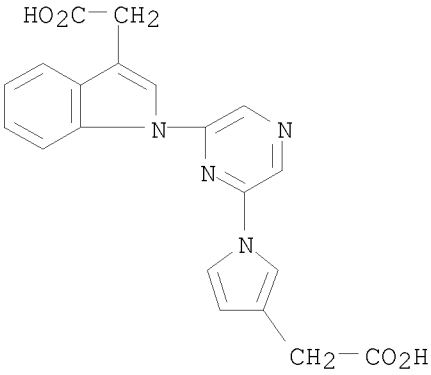
RN 875900-05-3 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-(1H-pyrrol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



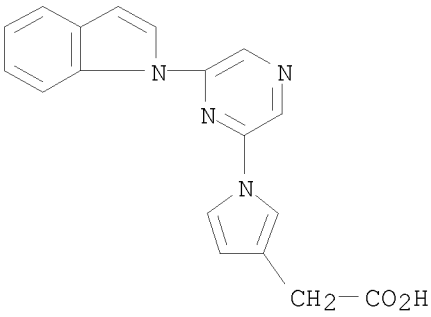
RN 875900-07-5 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-(2-thiazolylamino)-2-pyrazinyl]- (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 875900-12-2 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-[3-(carboxymethyl)-1H-pyrrol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)

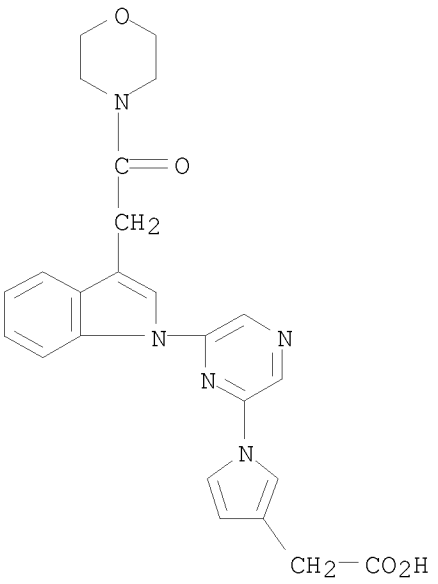


RN 875900-14-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)

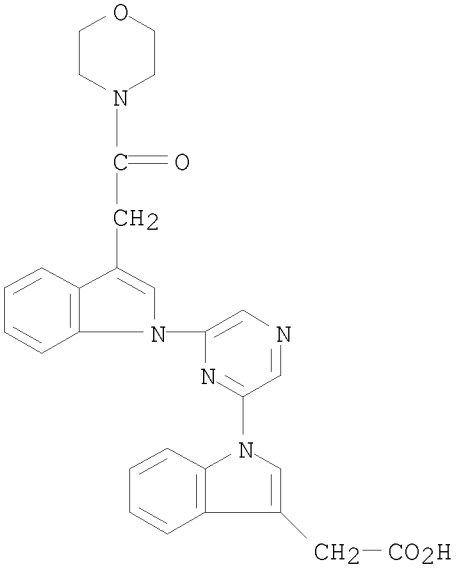


RN 875900-21-3 CAPLUS

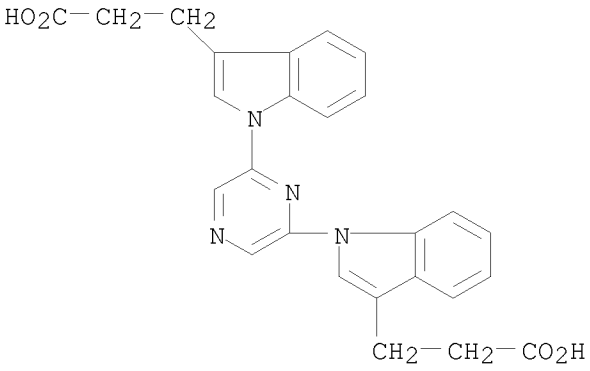
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)-2-oxoethyl]-1H-indol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



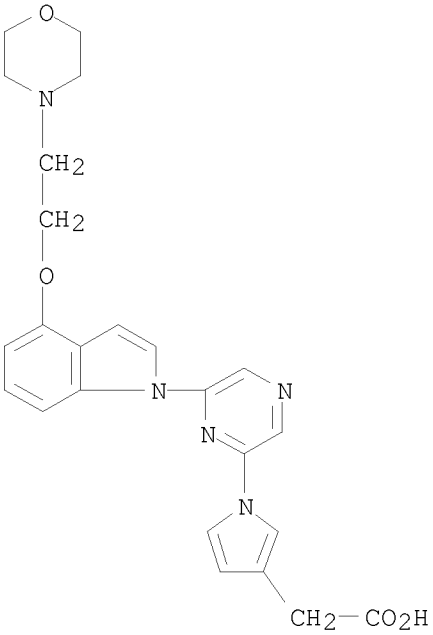
RN 875900-23-5 CAPLUS
CN 1H-Indole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)-2-oxoethyl]-1H-indol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



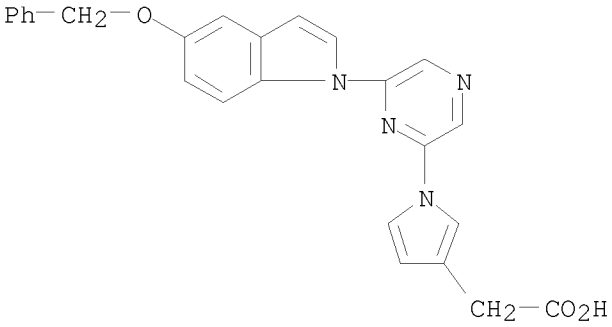
RN 875900-25-7 CAPLUS
CN 1H-Indole-3-propanoic acid, 1,1'-(2,6-pyrazinediyl)bis- (CA INDEX NAME)



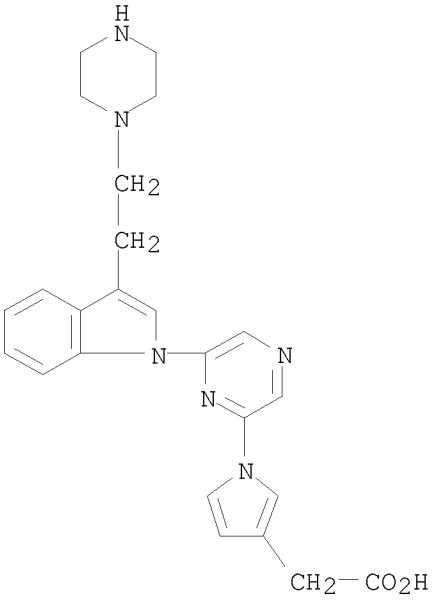
RN 875900-27-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-[2-(4-morpholinyl)ethoxy]-1H-indol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



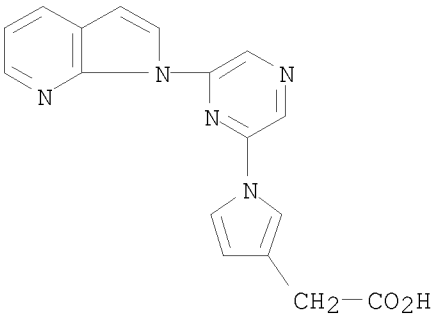
RN 875900-30-4 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[5-(phenylmethoxy)-1H-indol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



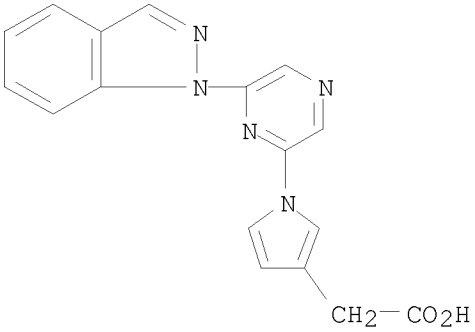
RN 875900-33-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-[2-(1-piperazinyl)ethyl]-1H-indol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



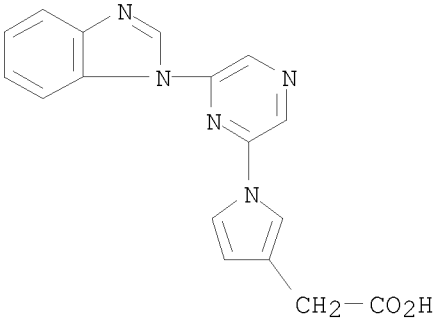
RN 875900-35-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-pyrrolo[2,3-b]pyridin-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



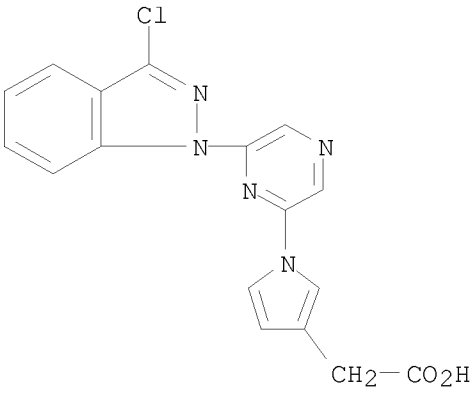
RN 875900-37-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



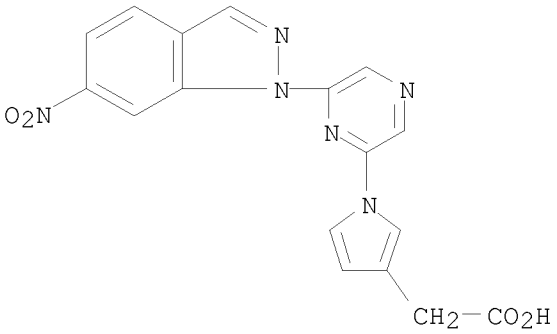
RN 875900-39-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(1H-benzimidazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



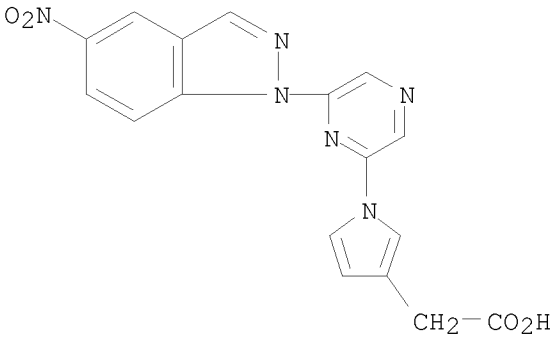
RN 875900-41-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-chloro-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



RN 875900-43-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(6-nitro-1H-indazol-1-yl)-2-pyrazinyl]-
(CA INDEX NAME)



RN 875900-69-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(5-nitro-1H-indazol-1-yl)-2-pyrazinyl]-
(CA INDEX NAME)



RN 875900-71-3 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[4-[2-(4-morpholinyl)ethoxy]-1H-indazol-1-

yl]-2-pyrazinyl]- (CA INDEX NAME)

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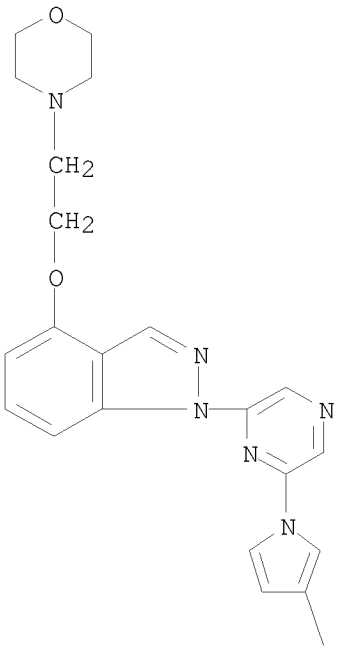
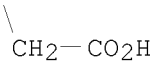
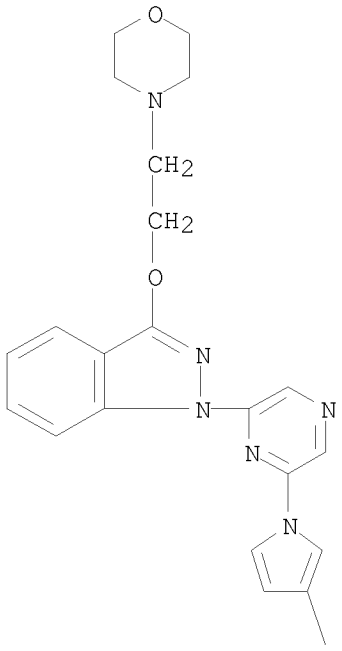


PAGE 2-A

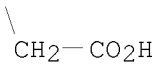


RN 875900-73-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-[2-(4-morpholinyl)ethoxy]-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)

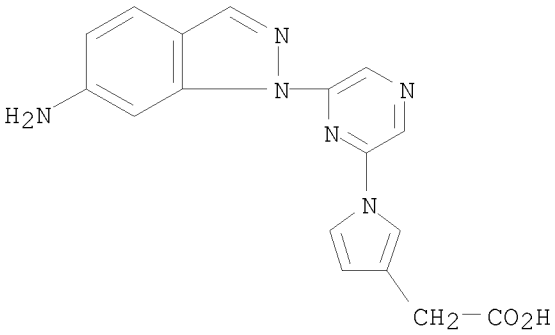
PAGE 1-A



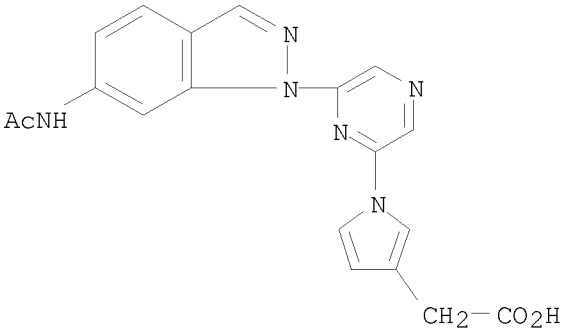
PAGE 2-A



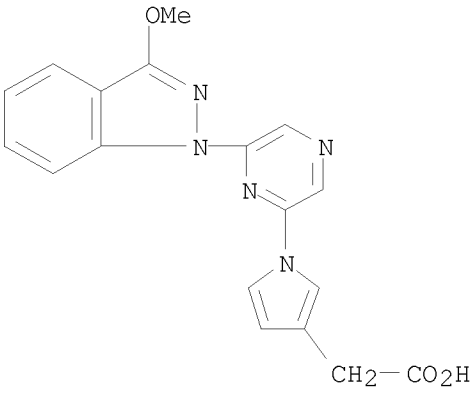
RN 875900-75-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(6-amino-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



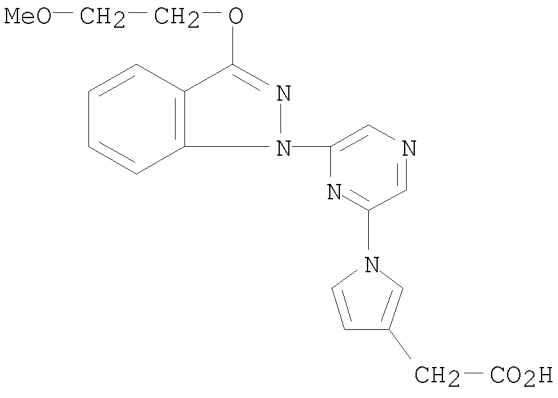
RN 875900-77-9 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[6-(acetylamino)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



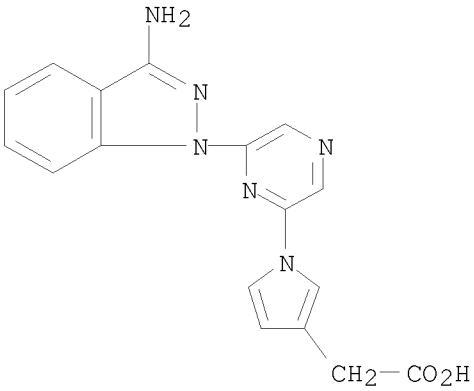
RN 875900-79-1 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-methoxy-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



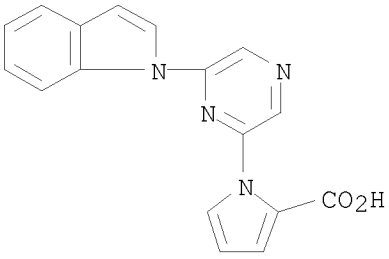
RN 875900-81-5 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-[3-(2-methoxyethoxy)-1H-indazol-1-yl]-2-pyrazinyl]- (CA INDEX NAME)



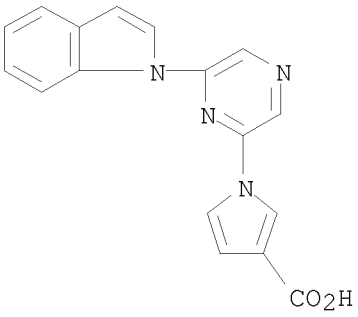
RN 875900-83-7 CAPLUS
CN 1H-Pyrrole-3-acetic acid, 1-[6-(3-amino-1H-indazol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



RN 875900-85-9 CAPLUS
CN 1H-Pyrrole-2-carboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)

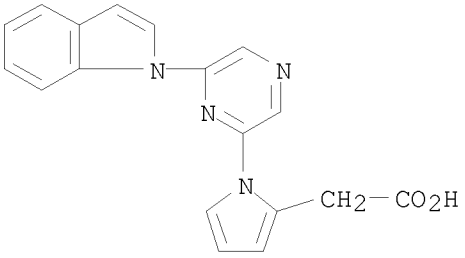


RN 875900-87-1 CAPLUS
CN 1H-Pyrrole-3-carboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)

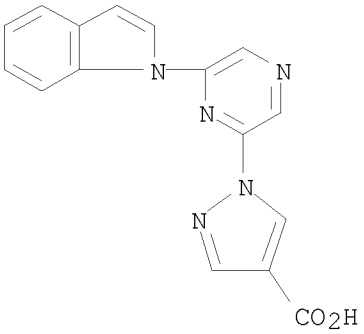


RN 875900-89-3 CAPLUS

CN 1H-Pyrrole-2-acetic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



RN 875900-91-7 CAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 1-[6-(1H-indol-1-yl)-2-pyrazinyl]- (CA INDEX NAME)



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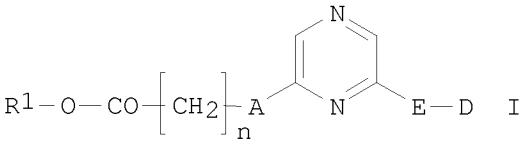

AB Pyrazines I [n = 0-2; R1 = H, C1-3 linear alkyl; A = indolediyl, pyrrolediyl, furandiyl, thiophenediyl, (iso)thiazolediyl, triazolediyl, etc.; E = none, NH; when E = NH, then D = thiazolyl, (un)substituted Ph; when E = none, then D = (2-phenoxy)phenyl, naphthyl, (iso)quinolyl, (7-aza)indolyl, benzofuranyl, benzothienyl, pyrrolyl, (iso)thiazolyl, etc.], their derivs., or their pharmacol. acceptable salts are prepared The compds. are useful for treatment of acute or chronic glomerulonephritis, mesangial proliferative glomerulonephritis, IgA nephropathy, minimal change nephrotic syndrome, membranoproliferative glomerulonephritis, and lupus nephritis. Thus, Et indole-3-acetate was condensed with 2,6-diiodopyrazine and the product was hydrolyzed to give 2-[1-[6-[3-(carboxymethyl)indolyl]pyrazin-2-yl]indol-3-yl]acetic acid,

which at 50 mg/kg i.p. showed efficacy in anti-GBM nephritis in rats without adversely affecting the body weight nor organs.

L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:638866 CAPLUS
DOCUMENT NUMBER: 143:153403
TITLE: Preparation of benzimidazolylazines and related compounds as selective JAK3 kinase inhibitors
INVENTOR(S): Styles, Michelle Leanne; Zeng, Jun; Treutlein, Herbert Rudolf; Wilks, Andrew Frederick; Kling, Marcel Robert; Bu, Xianyong; Burns, Christopher John
PATENT ASSIGNEE(S): Cytopia Research Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005066156	A1	20050721	WO 2005-AU22		20050112
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2005203919	A1	20050721	AU 2005-203919		20050112
CA 2545427	A1	20050721	CA 2005-2545427		20050112
EP 1704145	A1	20060927	EP 2005-700054		20050112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS					
GB 2424882	A	20061011	GB 2006-12225		20050112
GB 2424882	B	20080806			
CN 1906190	A	20070131	CN 2005-80001563		20050112
BR 2005006817	A	20070529	BR 2005-6817		20050112
GB 2432834	A	20070606	GB 2007-4098		20050112
JP 2007517807	T	20070705	JP 2006-548036		20050112
IN 2006KN00845	A	20070413	IN 2006-KN845		20060406
KR 2006126983	A	20061211	KR 2006-711057		20060605
MX 2006007640	A	20070417	MX 2006-7640		20060630
US 20080207613	A1	20080828	US 2006-585916		20060711
PRIORITY APPLN. INFO.:			AU 2004-900103	A	20040112
			GB 2006-12225	A3	20050112
			WO 2005-AU22	W	20050112

OTHER SOURCE(S): CASREACT 143:153403; MARPAT 143:153403
IT 860293-18-1P 860300-29-4P 860300-30-7P
860300-31-8P 860300-32-9P 860300-33-0P
860300-35-2P 860300-37-4P 860300-38-5P
860300-39-6P 860300-40-9P 860300-43-2P
860300-45-4P 860300-46-5P 860300-47-6P
860300-49-8P 860300-50-1P 860300-51-2P
860300-52-3P 860300-53-4P 860300-54-5P
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860300-58-9P 860300-59-0P 860300-60-3P
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860300-72-7P 860300-76-1P 860300-78-3P
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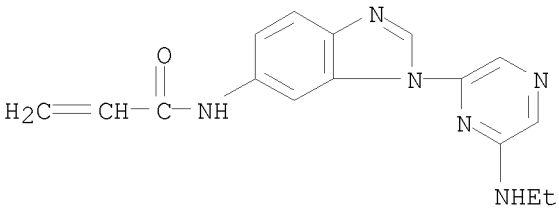
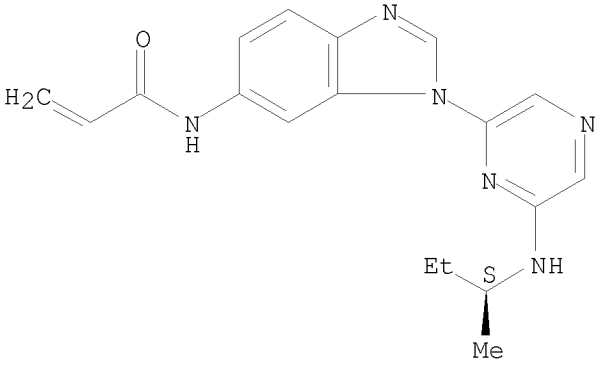
860301-05-9P 860301-11-7P 860301-12-8P
860301-13-9P 860301-15-1P 860301-19-5P
860301-20-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of benzimidazolylazines and related compds. as
selective JAK3 kinase inhibitors)

RN 860293-18-1 CAPLUS
CN 2-Propenamide, N-[1-[6-(ethylamino)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



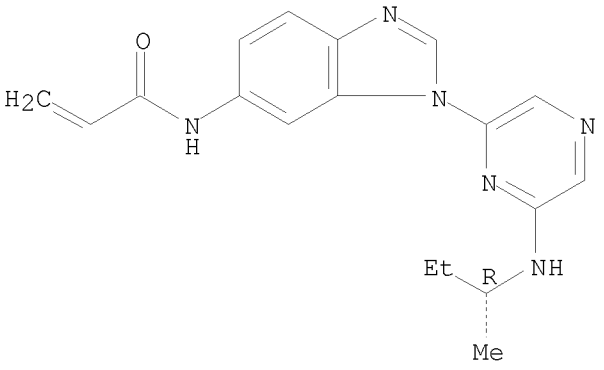
RN 860300-29-4 CAPLUS
CN 2-Propenamide, N-[1-[6-[[(1S)-1-methylpropyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.

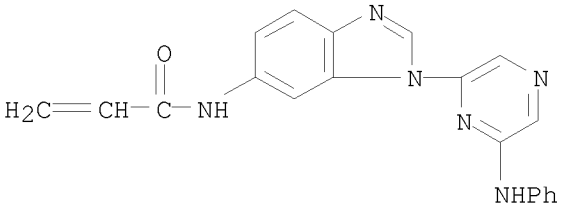


RN 860300-30-7 CAPLUS
CN 2-Propenamide, N-[1-[6-[[(1R)-1-methylpropyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

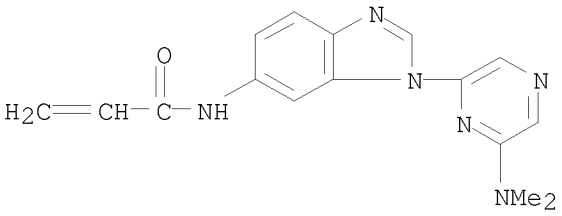
Absolute stereochemistry.



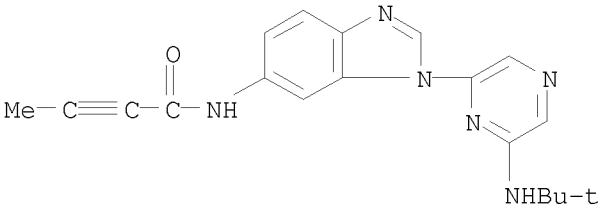
RN 860300-31-8 CAPLUS
CN 2-Propenamide, N-[1-[6-(phenylamino)-2-pyrazinyl]-1H-benzimidazol-6-yl]-
(CA INDEX NAME)



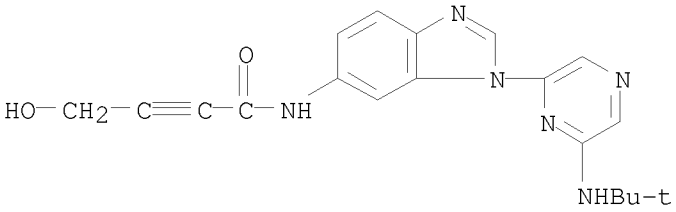
RN 860300-32-9 CAPLUS
CN 2-Propenamide, N-[1-[6-(dimethylamino)-2-pyrazinyl]-1H-benzimidazol-6-yl]-
(CA INDEX NAME)



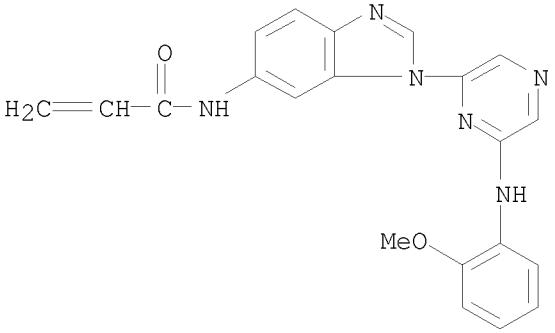
RN 860300-33-0 CAPLUS
CN 2-Butynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-
benzimidazol-6-yl]- (CA INDEX NAME)



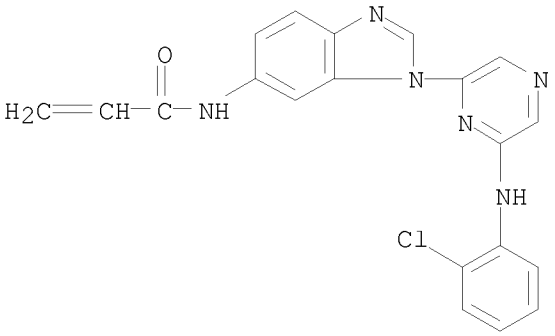
RN 860300-35-2 CAPLUS
CN 2-Butynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-4-hydroxy- (CA INDEX NAME)



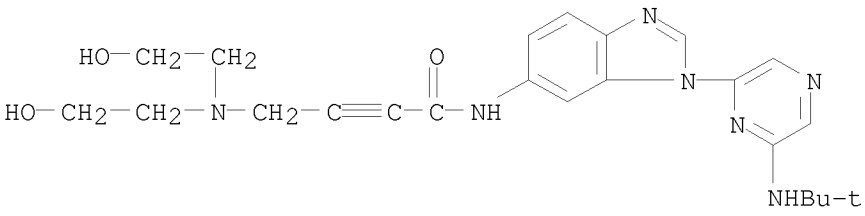
RN 860300-37-4 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2-methoxyphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



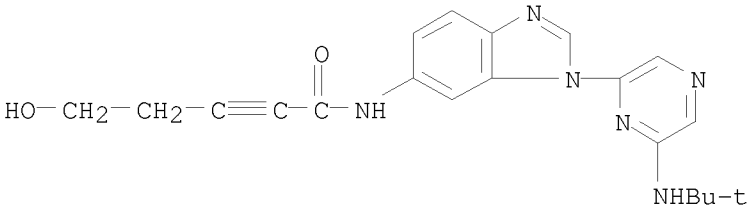
RN 860300-38-5 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2-chlorophenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



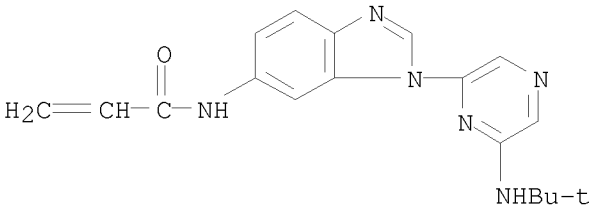
RN 860300-39-6 CAPLUS
CN 2-Butynamide, 4-[bis(2-hydroxyethyl)amino]-N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



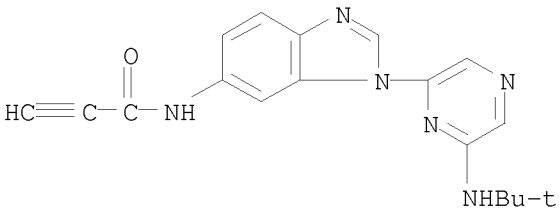
RN 860300-40-9 CAPLUS
CN 2-Pentynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-5-hydroxy- (CA INDEX NAME)



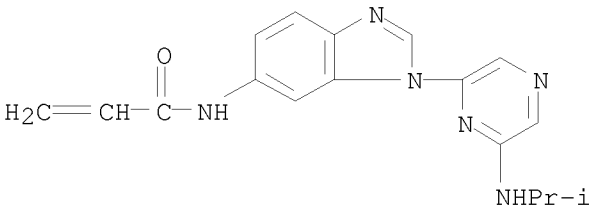
RN 860300-43-2 CAPLUS
CN 2-Propenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



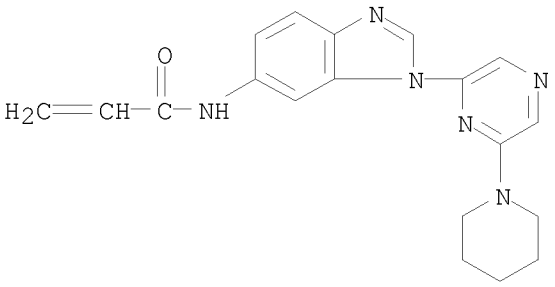
RN 860300-45-4 CAPLUS
CN 2-Propynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



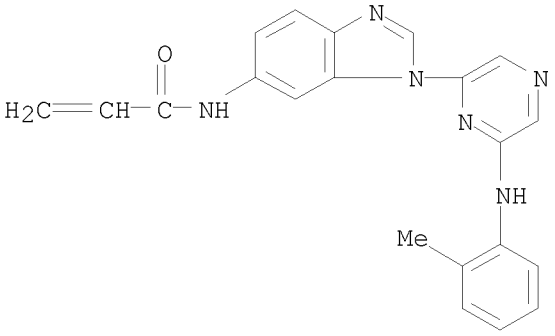
RN 860300-46-5 CAPLUS
CN 2-Propenamide, N-[1-[6-[(1-methylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



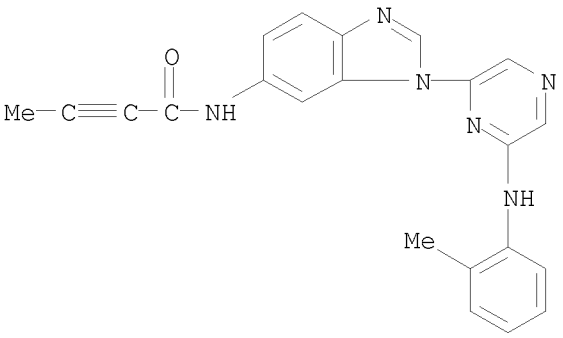
RN 860300-47-6 CAPLUS
CN 2-Propenamide, N-[1-[6-(1-piperidinyl)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



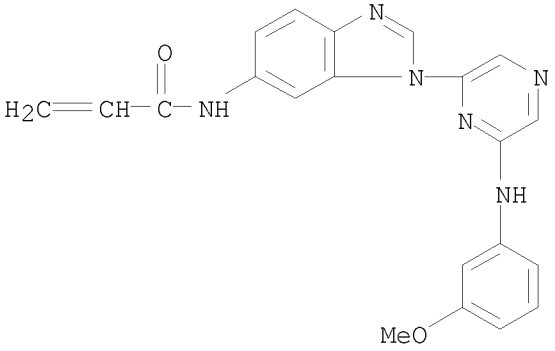
RN 860300-49-8 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2-methylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



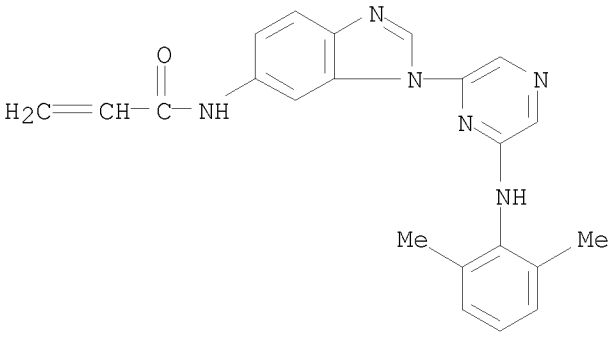
RN 860300-50-1 CAPLUS
CN 2-Butynamide, N-[1-[6-[(2-methylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



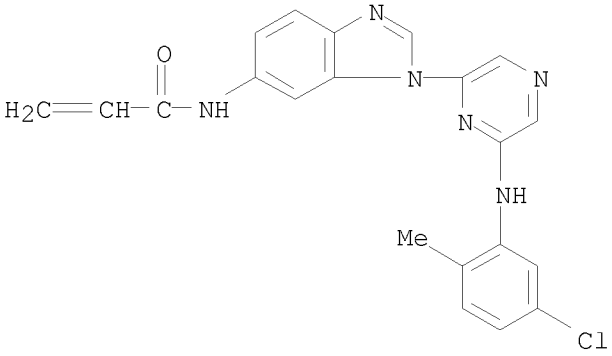
RN 860300-51-2 CAPLUS
CN 2-Propenamide, N-[1-[6-[(3-methoxyphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



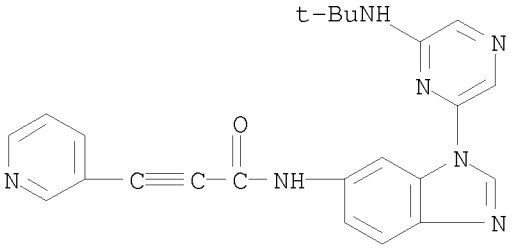
RN 860300-52-3 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2,6-dimethylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



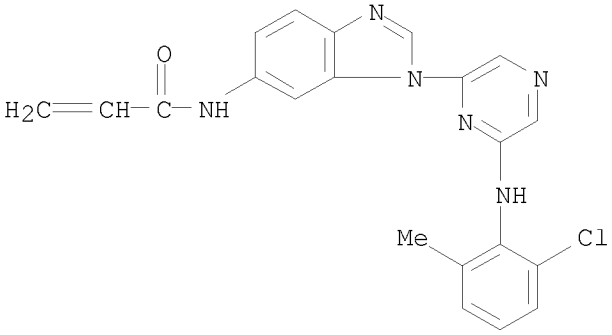
RN 860300-53-4 CAPLUS
CN 2-Propenamide, N-[1-[6-[(5-chloro-2-methylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



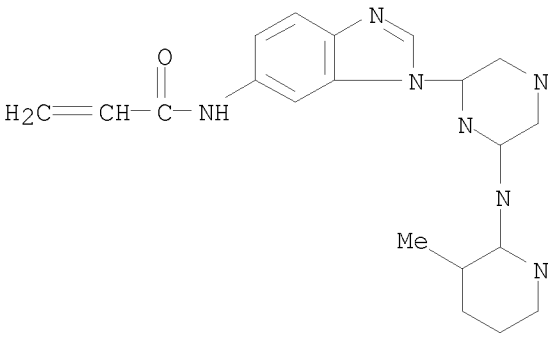
RN 860300-54-5 CAPLUS
CN 2-Propynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-3-(3-pyridinyl)- (CA INDEX NAME)



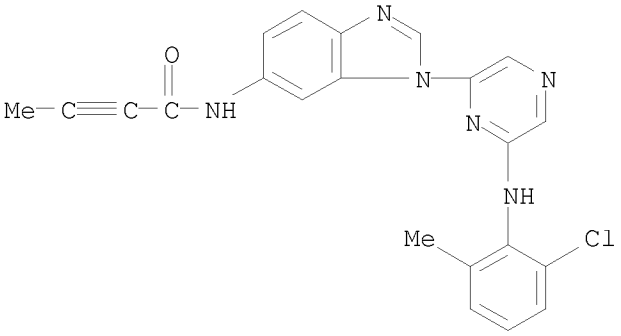
RN 860300-55-6 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2-chloro-6-methylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



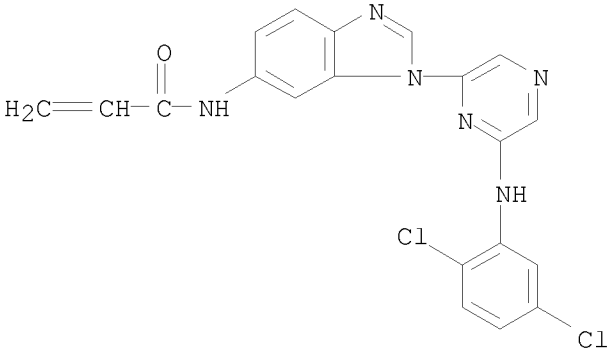
RN 860300-56-7 CAPLUS
CN 2-Propenamide, N-[1-[6-[(3-methyl-2-pyridinyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 860300-57-8 CAPLUS
CN 2-Butynamide, N-[1-[6-[(2-chloro-6-methylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

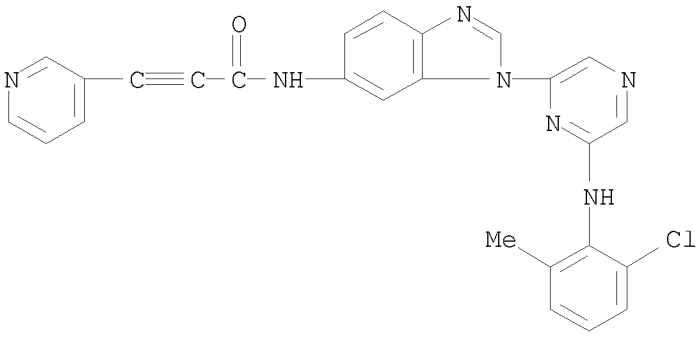


RN 860300-58-9 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2,5-dichlorophenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

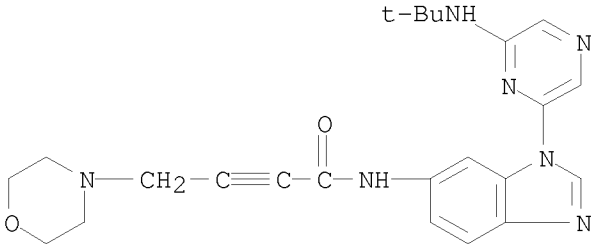


RN 860300-59-0 CAPLUS
CN 2-Propynamide, N-[1-[6-[(2-chloro-6-methylphenyl)amino]-2-pyrazinyl]-1H-

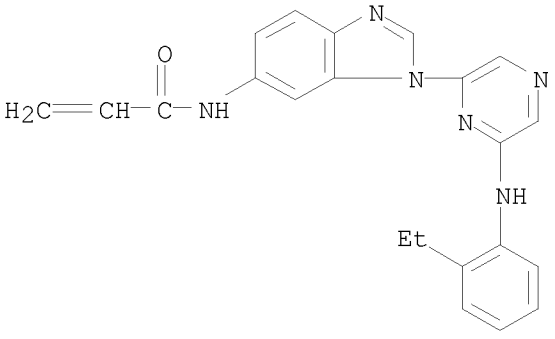
benzimidazol-6-yl]-3-(3-pyridinyl)- (CA INDEX NAME)



RN 860300-60-3 CAPLUS
CN 2-Butynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-4-(4-morpholinyl)- (CA INDEX NAME)

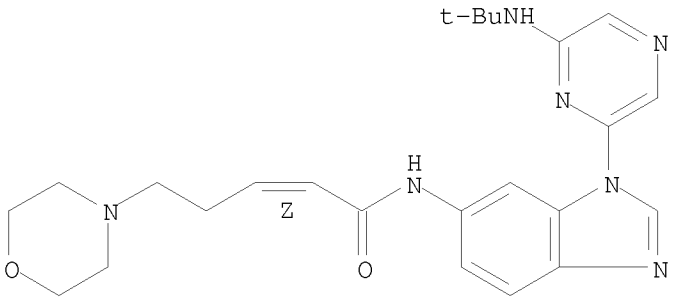


RN 860300-61-4 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2-ethylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

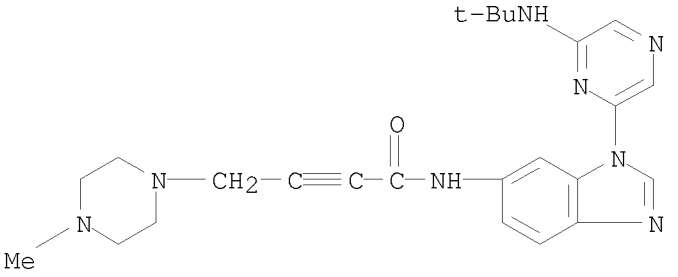


RN 860300-62-5 CAPLUS
CN 2-Pentenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-5-(4-morpholinyl)-, (2Z)- (CA INDEX NAME)

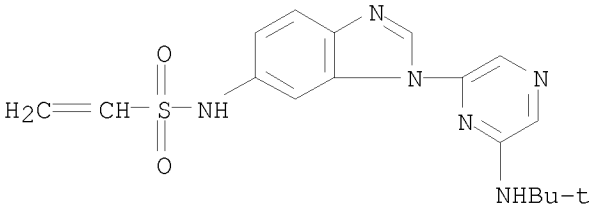
Double bond geometry as shown.



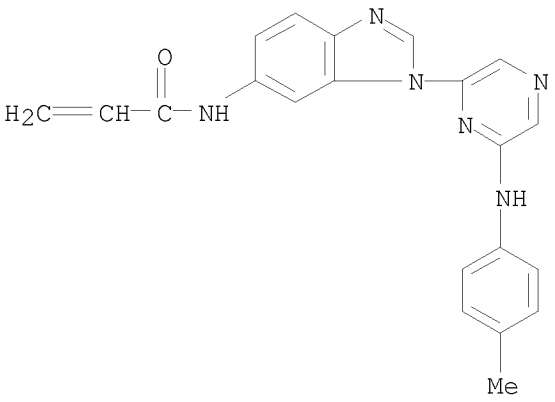
RN 860300-63-6 CAPLUS
CN 2-Butynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-4-(4-methyl-1-piperazinyl)- (CA INDEX NAME)



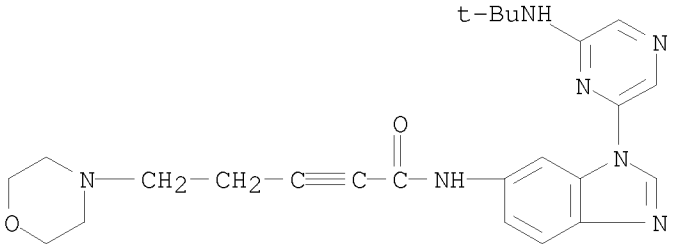
RN 860300-67-0 CAPLUS
CN Ethenesulfonamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



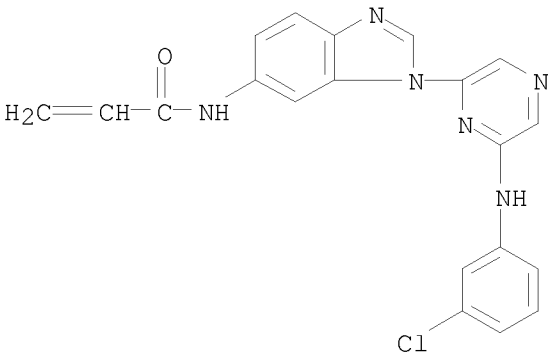
RN 860300-68-1 CAPLUS
CN 2-Propenamide, N-[1-[6-[(4-methylphenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



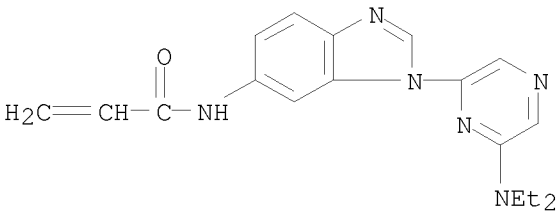
RN 860300-69-2 CAPLUS
CN 2-Pentynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-5-(4-morpholinyl)- (CA INDEX NAME)



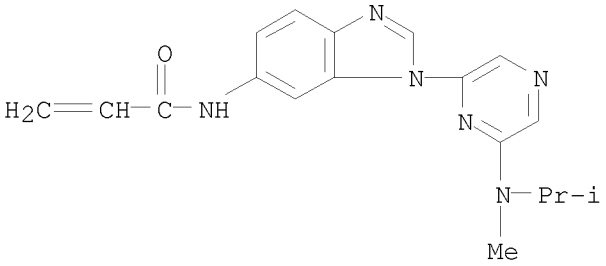
RN 860300-72-7 CAPLUS
CN 2-Propenamide, N-[1-[6-[(3-chlorophenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



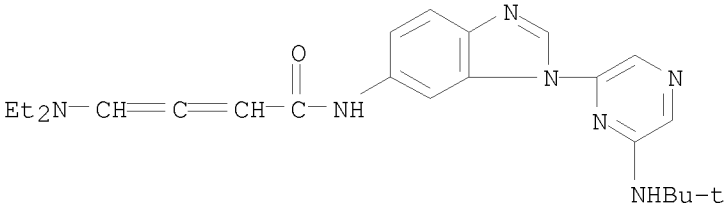
RN 860300-76-1 CAPLUS
CN 2-Propenamide, N-[1-[6-(diethylamino)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



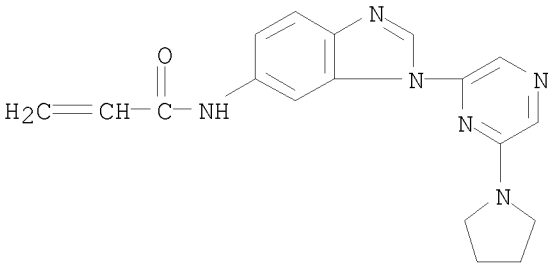
RN 860300-78-3 CAPLUS
CN 2-Propenamide, N-[1-[6-[methyl(1-methylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



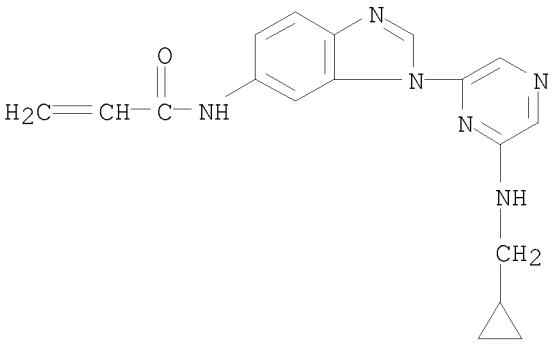
RN 860300-80-7 CAPLUS
CN 2,3-Butadienamide, 4-(diethylamino)-N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



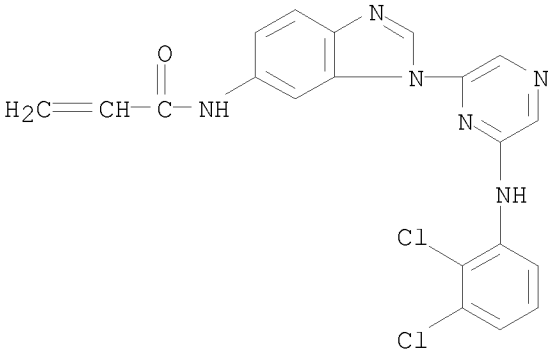
RN 860300-81-8 CAPLUS
CN 2-Propenamide, N-[1-[6-(1-pyrrolidinyl)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



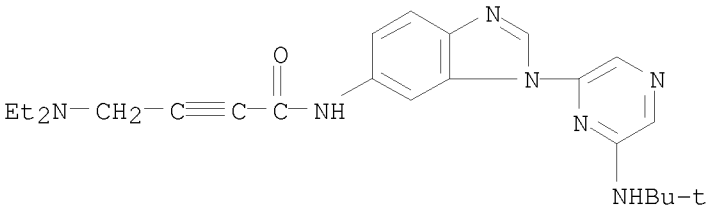
RN 860300-83-0 CAPLUS
CN 2-Propenamide, N-[1-[6-[(cyclopropylmethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



RN 860300-85-2 CAPLUS
CN 2-Propenamide, N-[1-[6-[(2,3-dichlorophenyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

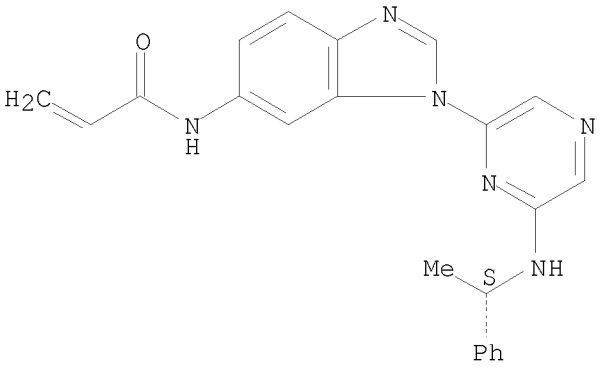


RN 860300-87-4 CAPLUS
CN 2-Butynamide, 4-(diethylamino)-N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

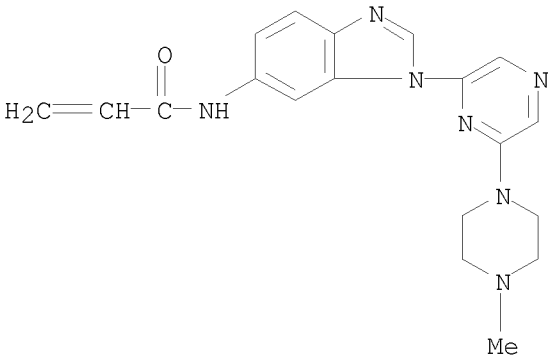


RN 860300-96-5 CAPLUS
CN 2-Propenamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.

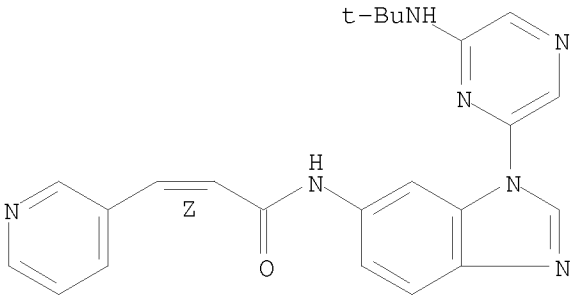


RN 860300-99-8 CAPLUS
CN 2-Propenamide, N-[1-[6-(4-methyl-1-piperazinyl)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



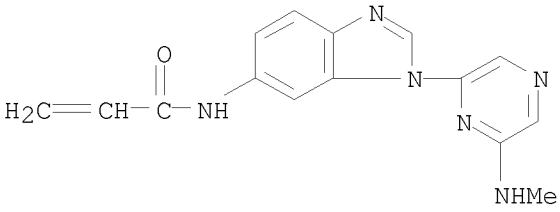
RN 860301-00-4 CAPLUS
CN 2-Propenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-3-(3-pyridinyl)-, (2Z)- (CA INDEX NAME)

Double bond geometry as shown.

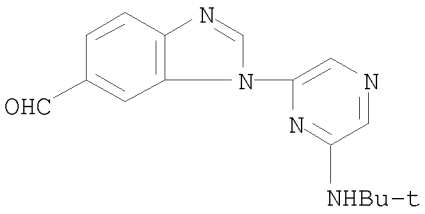


RN 860301-03-7 CAPLUS

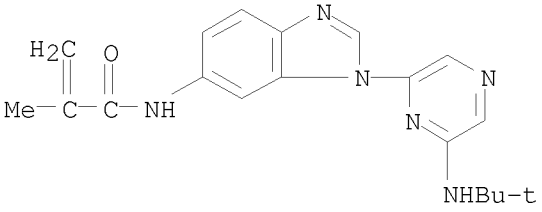
CN 2-Propenamide, N-[1-[6-(methylamino)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



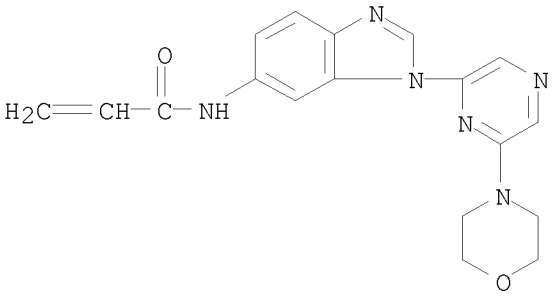
RN 860301-05-9 CAPLUS
CN 1H-Benzimidazole-6-carboxaldehyde, 1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]- (CA INDEX NAME)



RN 860301-11-7 CAPLUS
CN 2-Propenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-2-methyl- (CA INDEX NAME)

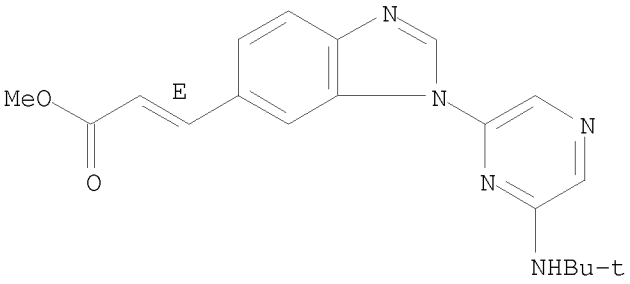


RN 860301-12-8 CAPLUS
CN 2-Propenamide, N-[1-[6-(4-morpholinyl)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

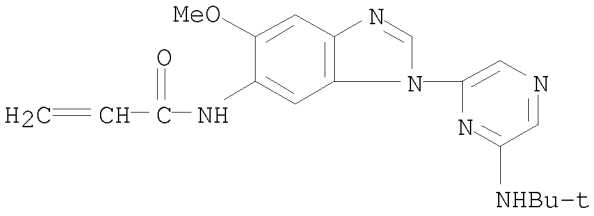


RN 860301-13-9 CAPLUS
CN 2-Propenoic acid, 3-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-, methyl ester, (2E)- (CA INDEX NAME)

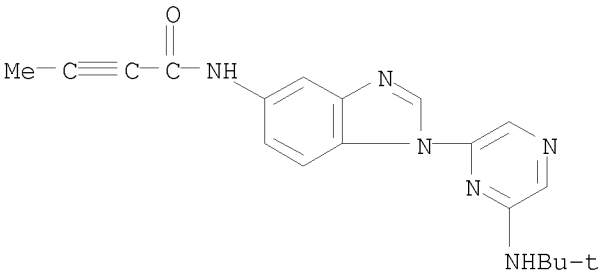
Double bond geometry as shown.



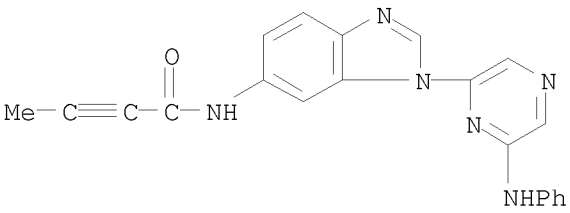
RN 860301-15-1 CAPLUS
CN 2-Propenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-5-methoxy-1H-benzimidazol-6-yl]- (CA INDEX NAME)



RN 860301-19-5 CAPLUS
CN 2-Butynamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

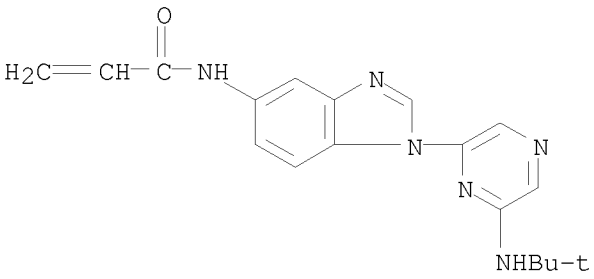


RN 860301-20-8 CAPLUS
CN 2-Butynamide, N-[1-[6-(phenylamino)-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

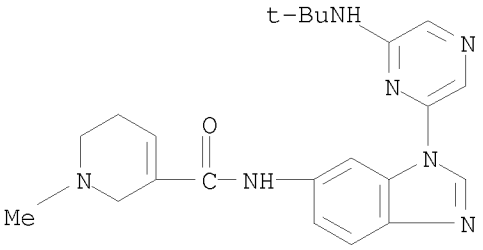


IT 860301-40-2P 860301-42-4P 860301-43-5P
860301-44-6P 860301-45-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzimidazolylazines and related compds. as selective JAK3 kinase inhibitors)

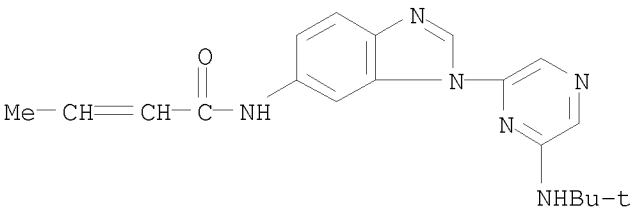
RN 860301-40-2 CAPLUS
CN 2-Propenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)



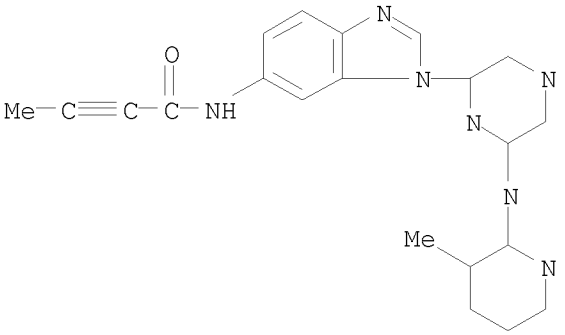
RN 860301-42-4 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-1,2,5,6-tetrahydro-1-methyl- (CA INDEX NAME)



RN 860301-43-5 CAPLUS
CN 2-Butenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

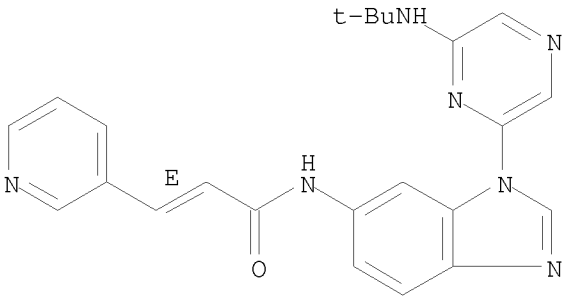


RN 860301-44-6 CAPLUS
CN 2-Butynamide, N-[1-[6-[(3-methyl-2-pyridinyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 860301-45-7 CAPLUS
CN 2-Propenamide, N-[1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]-3-(3-pyridinyl)-, (2E)- (CA INDEX NAME)

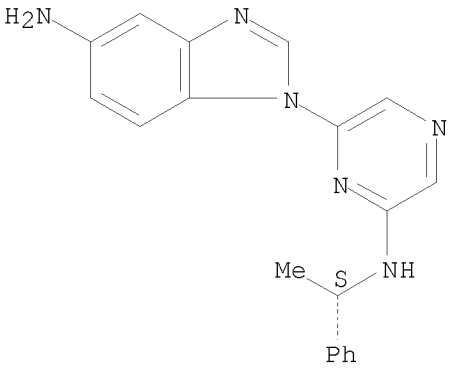
Double bond geometry as shown.



IT 629669-63-2P 629669-65-4P 860301-22-0P
860301-23-1P 860301-26-4P 860301-27-5P
860301-28-6P 860301-30-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzimidazolylazines and related compds. as selective JAK3 kinase inhibitors)
RN 629669-63-2 CAPLUS

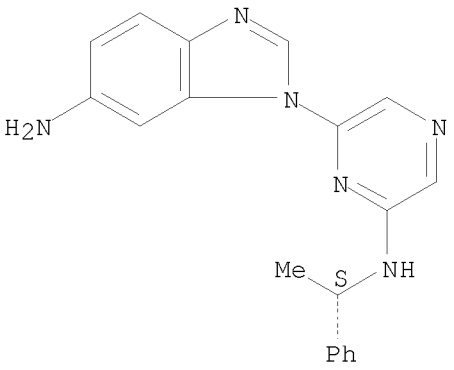
CN 1H-Benzimidazol-5-amine, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-
(CA INDEX NAME)

Absolute stereochemistry.

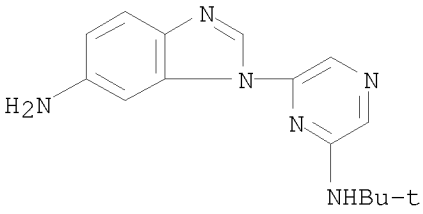


RN 629669-65-4 CAPLUS
CN 1H-Benzimidazol-6-amine, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-
(CA INDEX NAME)

Absolute stereochemistry.

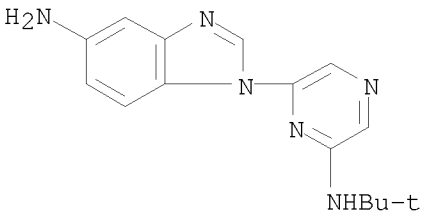


RN 860301-22-0 CAPLUS
CN 1H-Benzimidazol-6-amine, 1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-
(CA INDEX NAME)

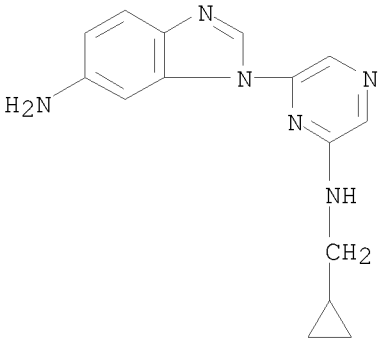


RN 860301-23-1 CAPLUS
CN 1H-Benzimidazol-5-amine, 1-[6-[(1,1-dimethylethyl)amino]-2-pyrazinyl]-

(CA INDEX NAME)



RN 860301-26-4 CAPLUS
CN 1H-Benzimidazol-6-amine, 1-[6-[(cyclopropylmethyl)amino]-2-pyrazinyl]- (CA INDEX NAME)



RN 860301-27-5 CAPLUS
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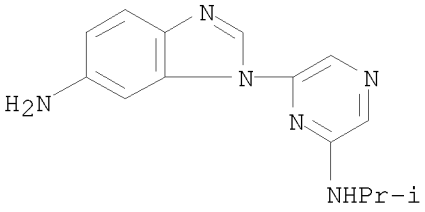

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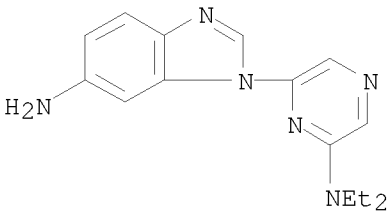
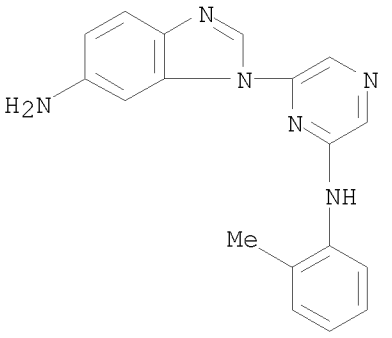
CN 1H-Benzimidazol-6-amine, 1-[6-(diethylamino)-2-pyrazinyl]- (CA INDEX NAME)



RN 860301-30-0 CAPLUS
CN 1H-Benzimidazol-6-amine, 1-[6-[(2-methylphenyl)amino]-2-pyrazinyl]- (CA INDEX NAME)



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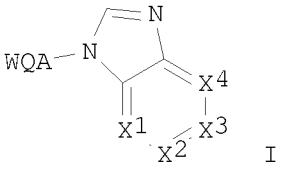

I

AB Title compds. [I; 1 of X1-X4 = CZ, the others = CY; or 1 of X1-X4 = N, 1 = CZ, the others = CY; A = (substituted) pyridyl, pyrazinyl, pyrimidyl, triazinyl, pyridazinyl; Q = bond, halo, alkyl, O, S, SO, SO2, CO, CS; W = H, alkyl, aryl, heteroaryl, cycloalkyl, alkylaryl, alkylheteroaryl, cycloalkyl, (substituted) amino, etc.; Y = H, halo, cyano, NO2, CF3, OH, alkyl, aminoalkyl, alkoxyalkyl, alkylheteroaryl, alkylthio, etc.; Z = (CH2)nCOCR9:CHR10, (CH2)nNR8COC.tplbond.CR9, etc.; n = 0-4; R8 = H, alkyl; R9, R10 = H, alkyl, alkylamino, alkylheteroaryl, etc.; R9R10 = atoms to form a 5-8 membered ring], were prepared Thus, a mixture of 1-[6-(tert-butylamino)pyrazin-2-yl]-1H-benzimidazol-5-amine (preparation given), Et3N, EDAC.HCl, 4-(1-pyrrolidino)pyridine, and acrylic acid were stirred together for 3 days in CH2Cl2 to give N-[1-[6-(tert-butylamino)pyrazin-2-yl]-1H-benzimidazol-5-yl]acrylamide. The latter gave ≥50% inhibition of JAK3 at 20 μM.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:523444 CAPLUS
DOCUMENT NUMBER: 143:60004
TITLE: Preparation of pyrazine derivatives as kinase inhibitors
INVENTOR(S): Burns, Christopher John; Wilks, Andrew Frederick; Bu, Xianyong
PATENT ASSIGNEE(S): Cytopia Research Pty Ltd., Australia
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005054230	A1	20050616	WO 2004-AU1690		20041203
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2004294355	A1	20050616	AU 2004-294355		20041203
CA 2545425	A1	20050616	CA 2004-2545425		20041203
EP 1689739	A1	20060816	EP 2004-801112		20041203
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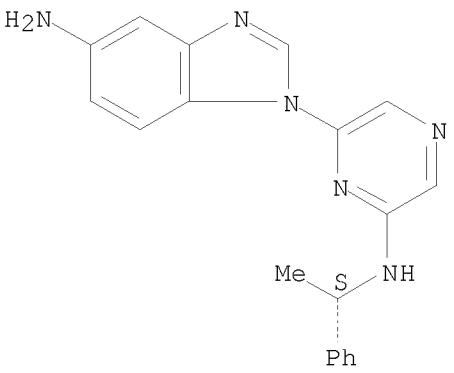
GB 2423083	A	20060816	GB 2006-11894		20041203
GB 2423083	B	20070711			
CN 1878767	A	20061213	CN 2004-80033482		20041203
BR 2004017345	A	20070313	BR 2004-17345		20041203
JP 2007513094	T	20070524	JP 2006-541751		20041203
IN 2006KN00616	A	20070727	IN 2006-KN616		20060316
MX 2006005983	A	20060907	MX 2006-5983		20060525
US 20070099935	A1	20070503	US 2006-581412		20060601
KR 2006126981	A	20061211	KR 2006-710931		20060602
PRIORITY APPLN. INFO.:			AU 2003-906686	A	20031203
			AU 2004-902060	A	20040420
			WO 2004-AU1690	W	20041203

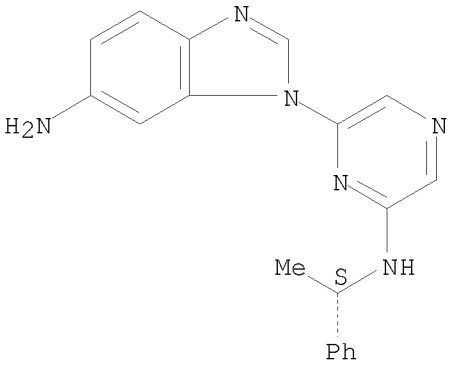
OTHER SOURCE(S): CASREACT 143:60004; MARPAT 143:60004
IT 629669-63-2P 629669-65-4P 629670-05-9P
853887-56-6P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of pyrazine derivs. as kinase inhibitors)
RN 629669-63-2 CAPLUS
CN 1H-Benzimidazol-5-amine, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



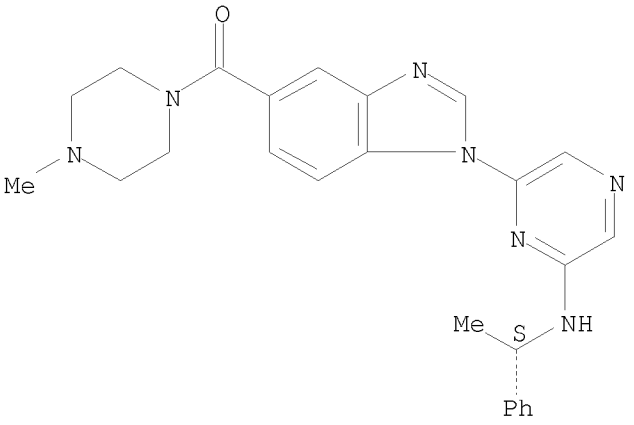
RN 629669-65-4 CAPLUS
CN 1H-Benzimidazol-6-amine, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

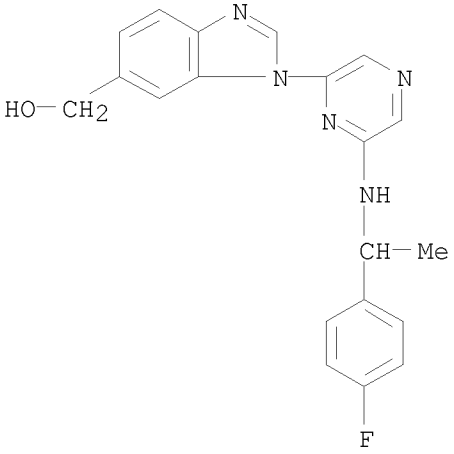


RN 629670-05-9 CAPLUS
CN Methanone, (4-methyl-1-piperazinyl)[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 853887-56-6 CAPLUS
CN 1H-Benzimidazole-6-methanol, 1-[6-[[1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



IT 629669-29-0P 629669-36-9P 629669-40-5P
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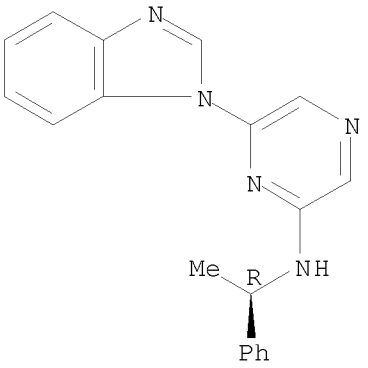
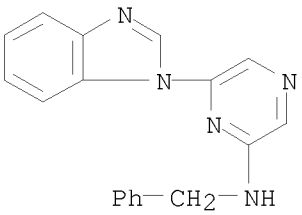
853888-44-5P 853888-45-6P 853888-46-7P
853888-47-8P 853888-48-9P 853888-49-0P
853888-50-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazine derivs. as kinase inhibitors)

RN 629669-29-0 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

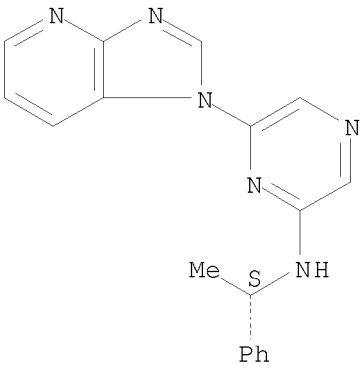


RN 629669-36-9 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-(phenylmethyl)- (CA INDEX NAME)



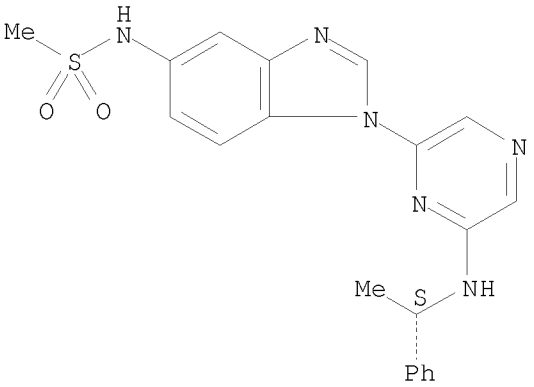
RN 629669-40-5 CAPLUS
CN 2-Pyrazinamine, 6-(1H-imidazo[4,5-b]pyridin-1-yl)-N-[(1S)-1-phenylethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



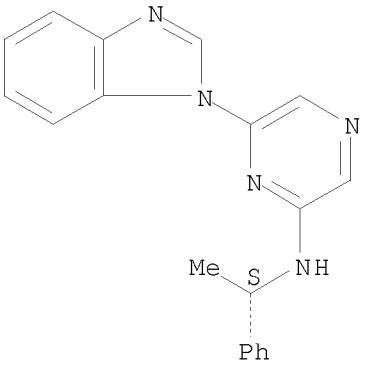
RN 629669-50-7 CAPLUS
CN Methanesulfonamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-
benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



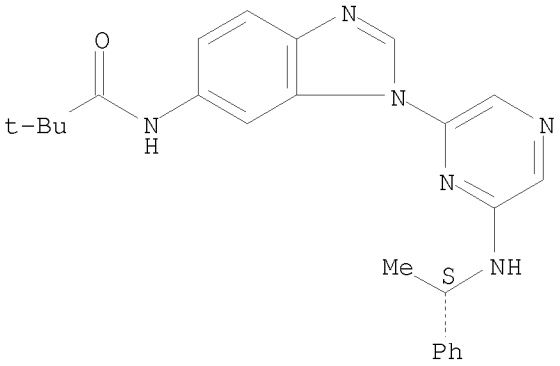
RN 629669-54-1 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-phenylethyl]- (CA
INDEX NAME)

Absolute stereochemistry.



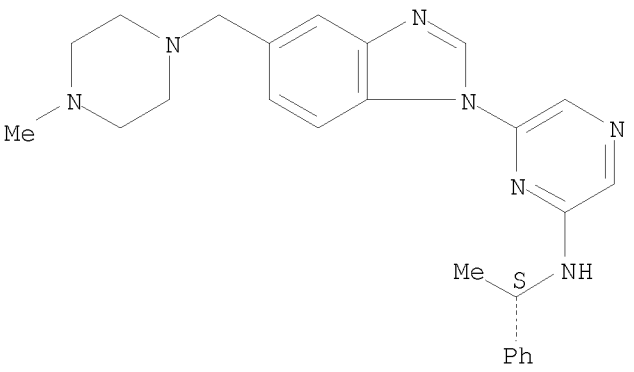
RN 629669-60-9 CAPLUS
CN Propanamide, 2,2-dimethyl-N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



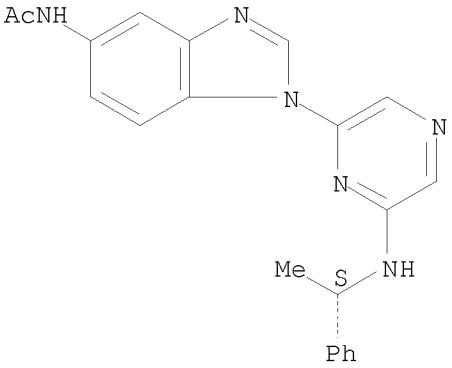
RN 629669-72-3 CAPLUS
CN 2-Pyrazinamine, 6-[5-[(4-methyl-1-piperazinyl)methyl]-1H-benzimidazol-1-yl]-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



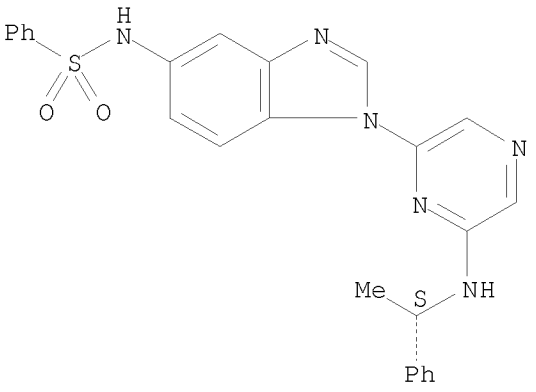
RN 629669-73-4 CAPLUS
CN Acetamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



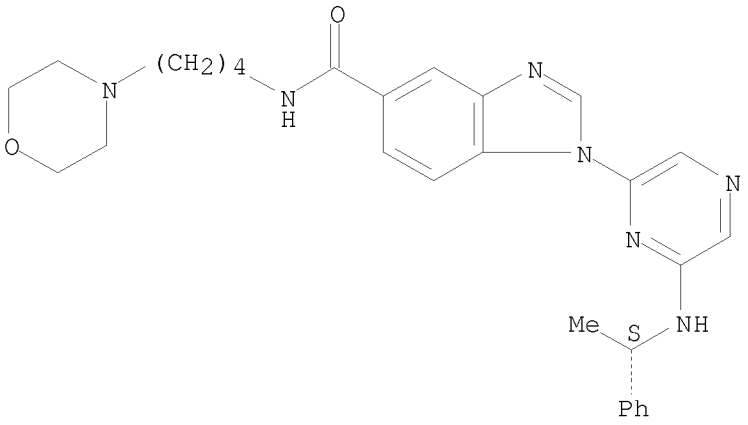
RN 629669-95-0 CAPLUS
CN Benzenesulfonamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



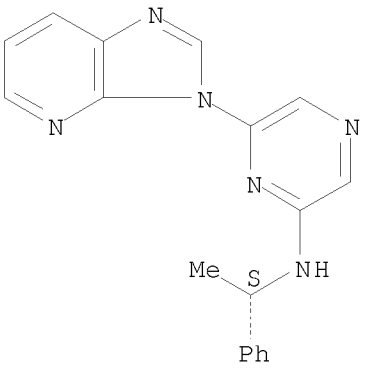
RN 629670-08-2 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-[4-(4-morpholinyl)butyl]-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

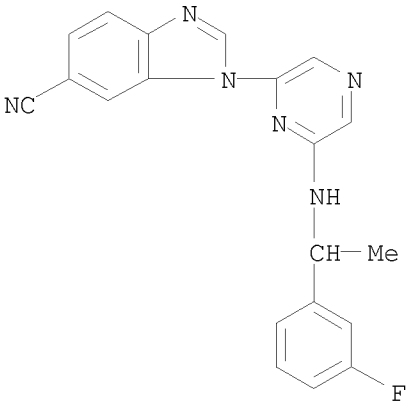


RN 629670-17-3 CAPLUS
CN 2-Pyrazinamine, 6-(3H-imidazo[4,5-b]pyridin-3-yl)-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

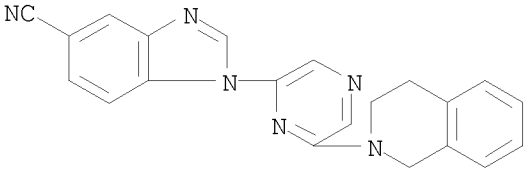
Absolute stereochemistry.



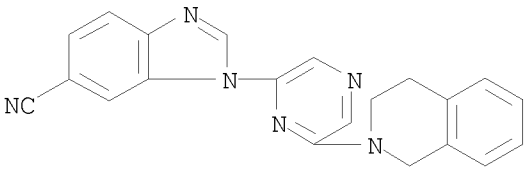
RN 853887-50-0 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-(3-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



RN 853887-51-1 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-(3,4-dihydro-2(1H)-isoquinolinyl)-2-pyrazinyl]- (CA INDEX NAME)

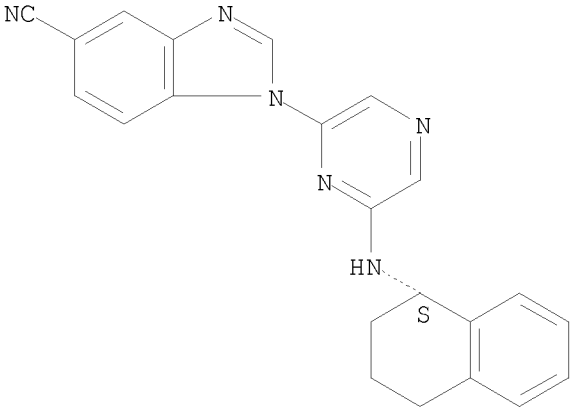


RN 853887-52-2 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-(3,4-dihydro-2(1H)-isoquinolinyl)-2-pyrazinyl]- (CA INDEX NAME)



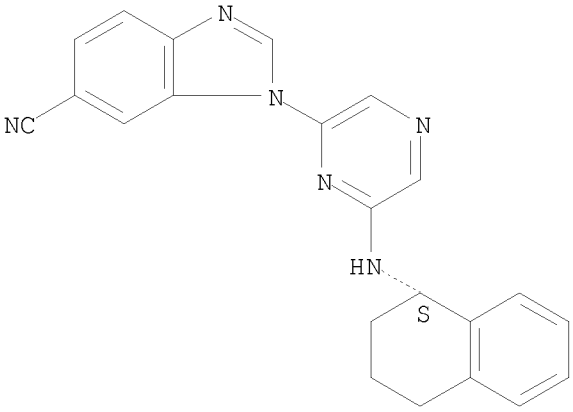
RN 853887-53-3 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[(1S)-1,2,3,4-tetrahydro-1-naphthalenyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



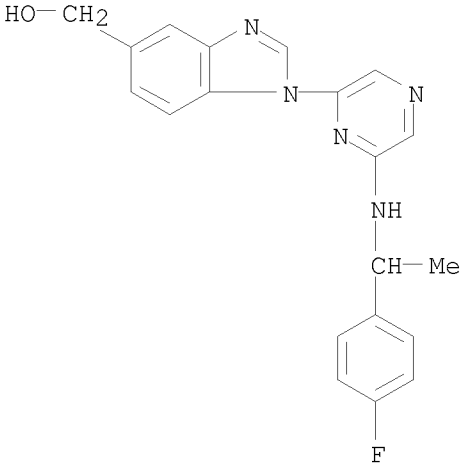
RN 853887-54-4 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1,2,3,4-tetrahydro-1-naphthalenyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

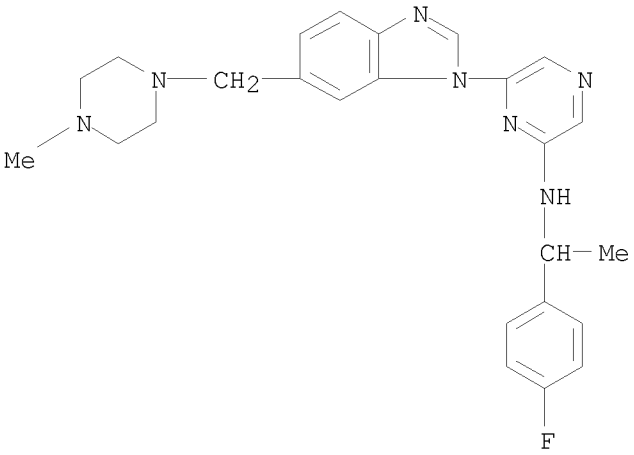


RN 853887-55-5 CAPLUS
CN 1H-Benzimidazole-5-methanol, 1-[6-[[1-(4-fluorophenyl)ethyl]amino]-2-

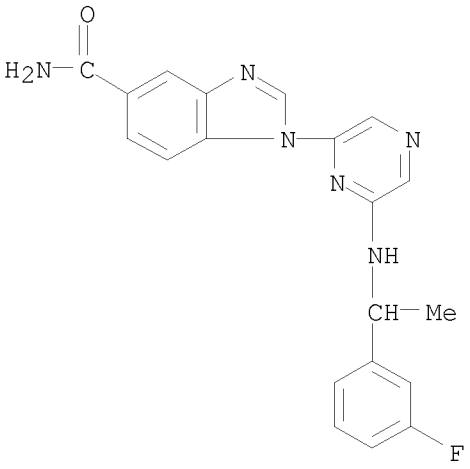
pyrazinyl]- (CA INDEX NAME)



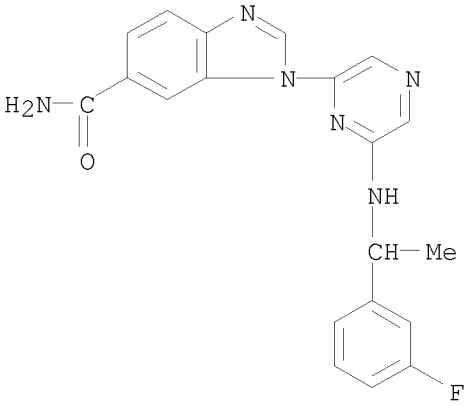
RN 853887-57-7 CAPLUS
CN 2-Pyrazinamine, N-[1-(4-fluorophenyl)ethyl]-6-[6-[(4-methyl-1-piperazinyl)methyl]-1H-benzimidazol-1-yl]- (CA INDEX NAME)



RN 853887-58-8 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 1-[6-[[1-(3-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

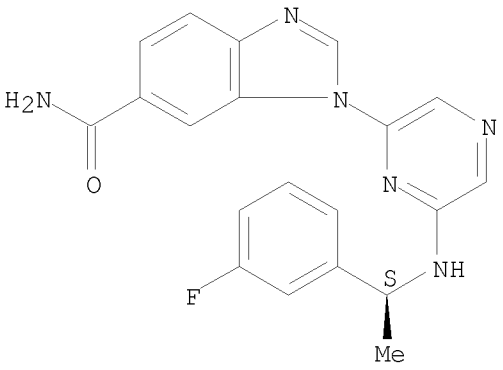


RN 853887-59-9 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, 1-[6-[[1-(3-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



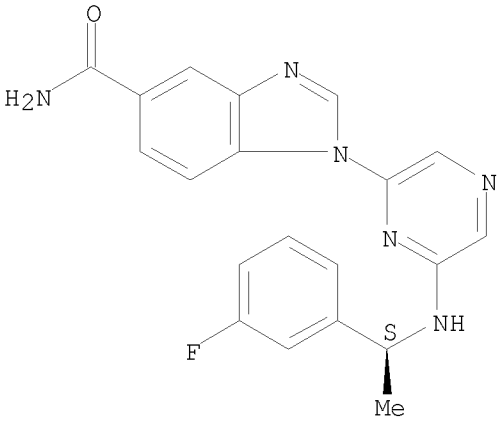
RN 853887-60-2 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, 1-[6-[[(1S)-1-(3-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



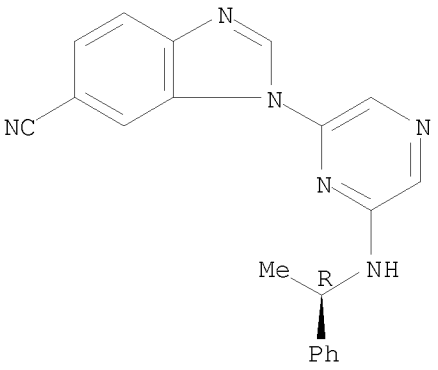
RN 853887-61-3 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 1-[6-[[(1S)-1-(3-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



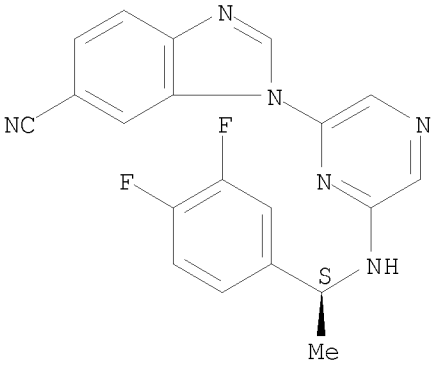
RN 853887-62-4 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1R)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



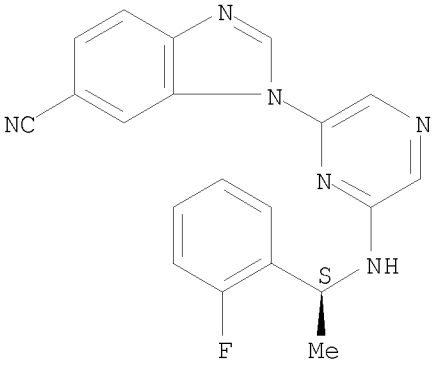
RN 853887-63-5 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1-(3,4-difluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



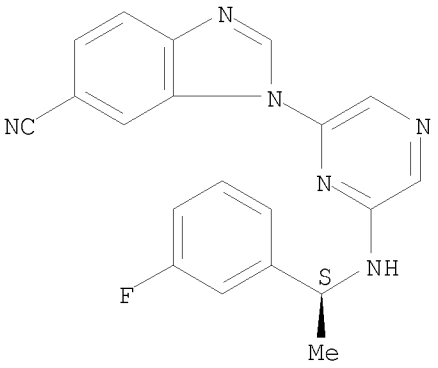
RN 853887-64-6 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1-(2-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



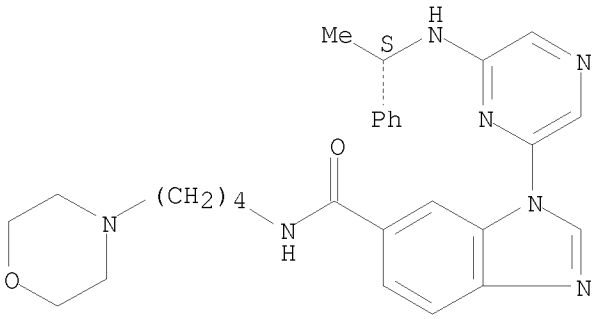
RN 853887-65-7 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1-(3-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

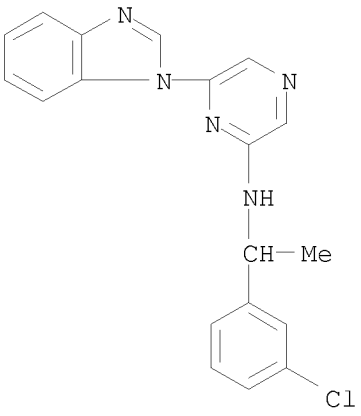


RN 853887-66-8 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, N-[4-(4-morpholinyl)butyl]-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

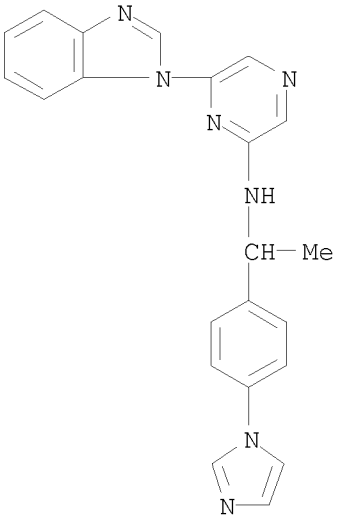
Absolute stereochemistry.



RN 853887-67-9 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[1-(3-chlorophenyl)ethyl]- (CA INDEX NAME)

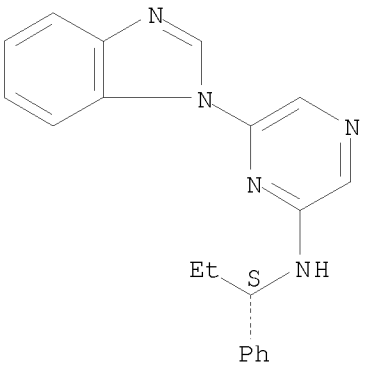


RN 853887-68-0 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[1-[4-(1H-imidazol-1-yl)phenyl]ethyl]- (CA INDEX NAME)

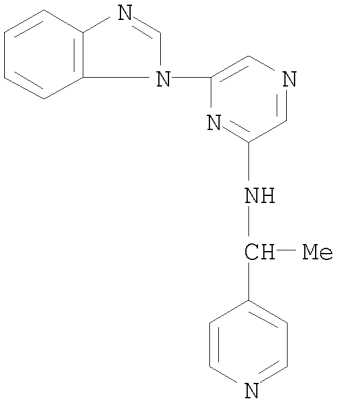


RN 853887-69-1 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.

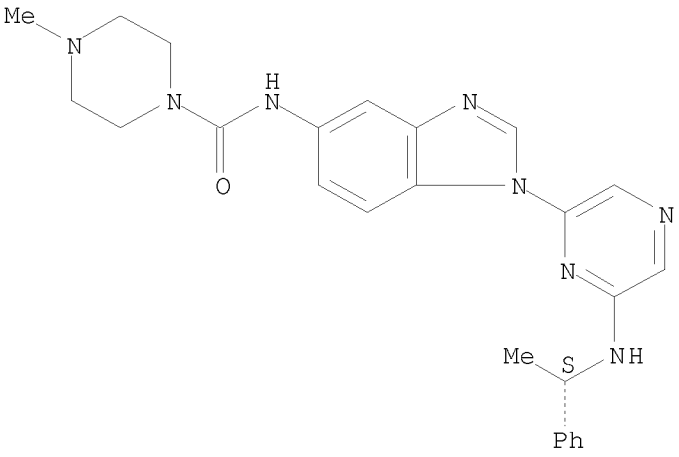


RN 853887-70-4 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[1-(4-pyridinyl)ethyl]- (CA INDEX NAME)



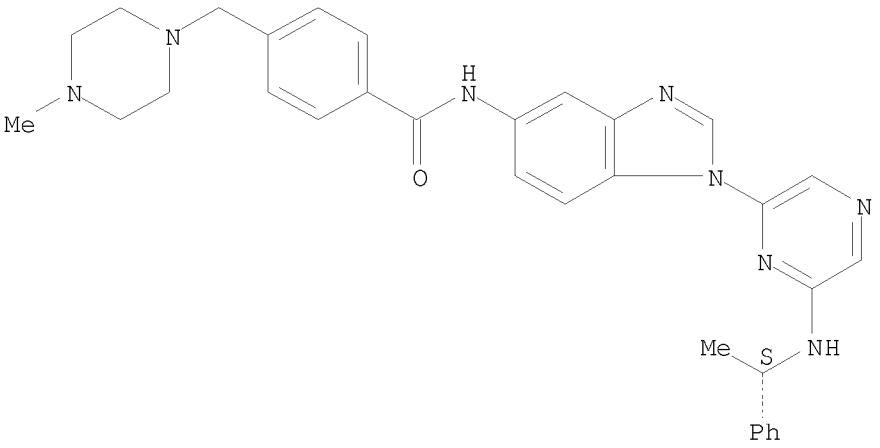
RN 853887-71-5 CAPLUS
CN 1-Piperazinecarboxamide, 4-methyl-N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.

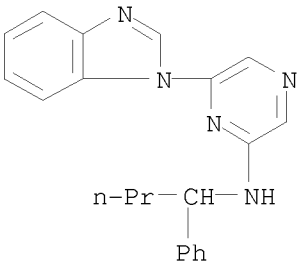


RN 853887-72-6 CAPLUS
CN Benzamide, 4-[(4-methyl-1-piperazinyl)methyl]-N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.

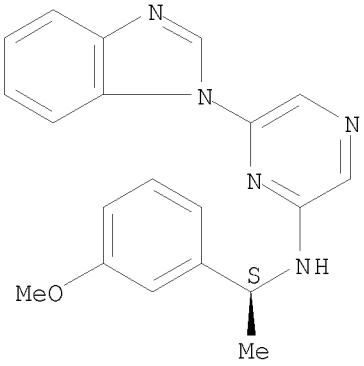


RN 853887-78-2 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-(1-phenylbutyl)- (CA INDEX NAME)

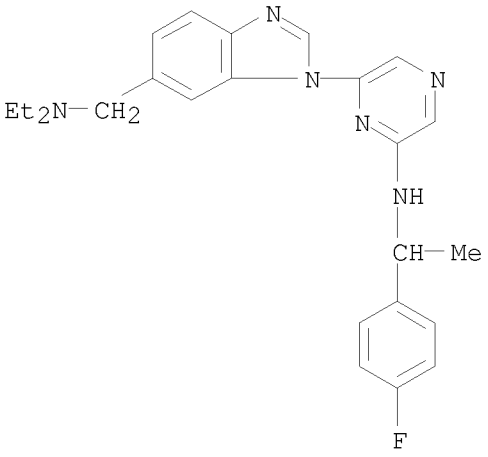


RN 853887-79-3 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-(3-methoxyphenyl)ethyl]-
(CA INDEX NAME)

Absolute stereochemistry.

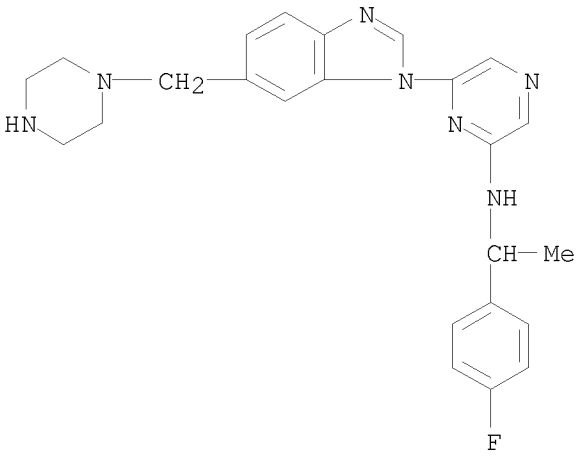


RN 853887-80-6 CAPLUS
CN 1H-Benzimidazole-6-methanamine, N,N-diethyl-1-[6-[[1-(4-
fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

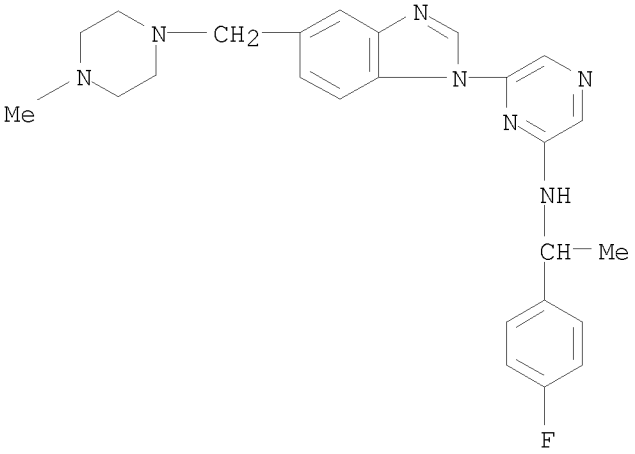


RN 853887-81-7 CAPLUS

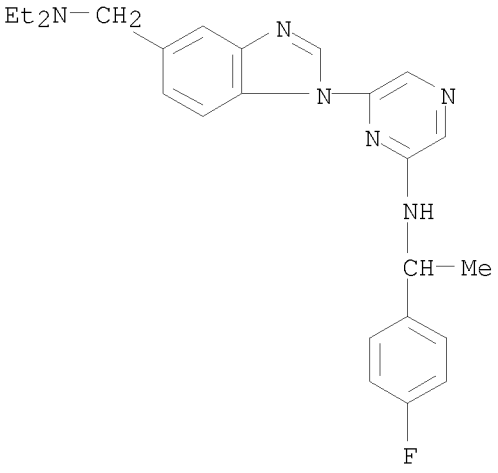
CN 2-Pyrazinamine, N-[1-(4-fluorophenyl)ethyl]-6-[6-(1-piperazinylmethyl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)



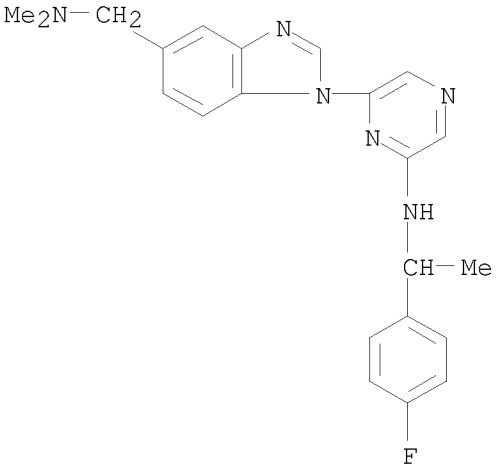
RN 853887-82-8 CAPLUS
CN 2-Pyrazinamine, N-[1-(4-fluorophenyl)ethyl]-6-[5-[(4-methyl-1-piperazinyl)methyl]-1H-benzimidazol-1-yl]- (CA INDEX NAME)



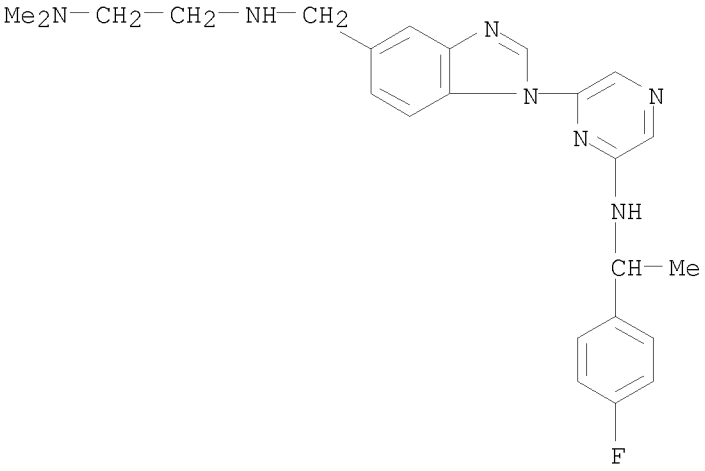
RN 853887-83-9 CAPLUS
CN 1H-Benzimidazole-5-methanamine, N,N-diethyl-1-[6-[[1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



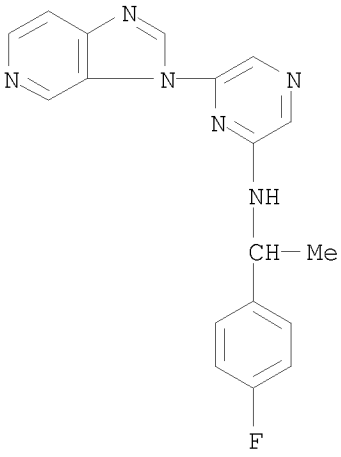
RN 853887-84-0 CAPLUS
CN 1H-Benzimidazole-5-methanamine, 1-[6-[[1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]-N,N-dimethyl- (CA INDEX NAME)



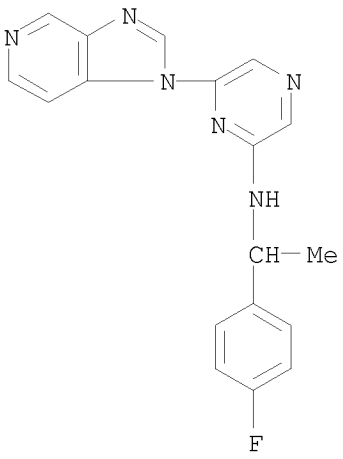
RN 853887-85-1 CAPLUS
CN 1,2-Ethanediamine, N'-[[1-[6-[[1-(4-fluorophenyl)ethyl]amino]pyrazinyl]-1H-benzimidazol-5-yl]methyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 853887-86-2 CAPLUS
CN 2-Pyrazinamine, N-[1-(4-fluorophenyl)ethyl]-6-(3H-imidazo[4,5-c]pyridin-3-yl)- (CA INDEX NAME)

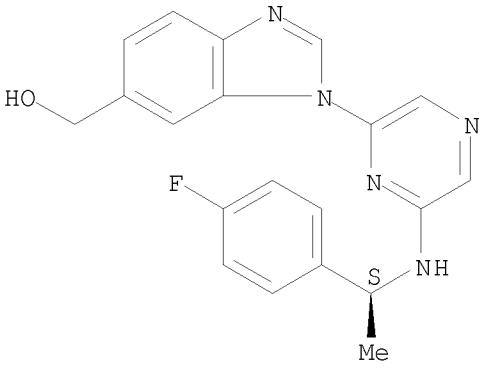


RN 853887-87-3 CAPLUS
CN 2-Pyrazinamine, N-[1-(4-fluorophenyl)ethyl]-6-(1H-imidazo[4,5-c]pyridin-1-yl)- (CA INDEX NAME)



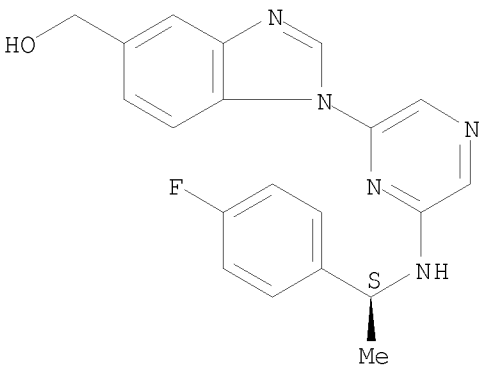
RN 853887-88-4 CAPLUS
CN 1H-Benzimidazole-6-methanol, 1-[6-[[(1S)-1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



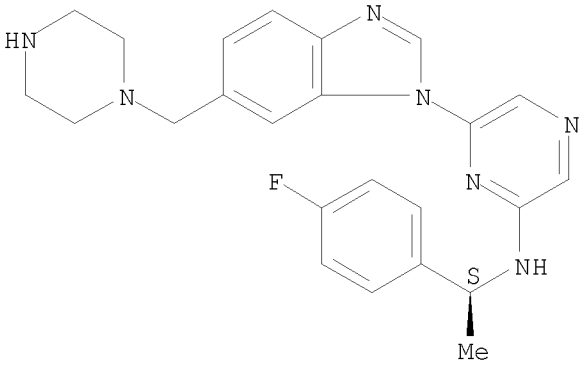
RN 853887-89-5 CAPLUS
CN 1H-Benzimidazole-5-methanol, 1-[6-[[(1S)-1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



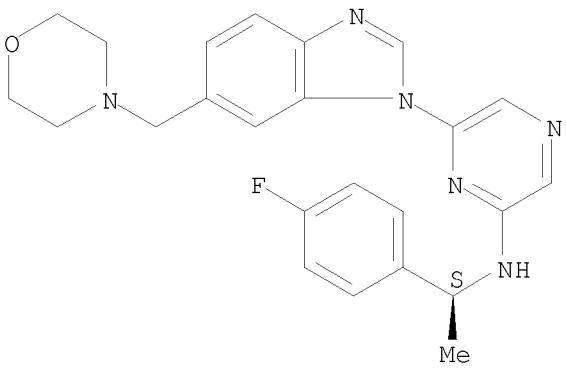
RN 853887-90-8 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-[6-(1-piperazinylmethyl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



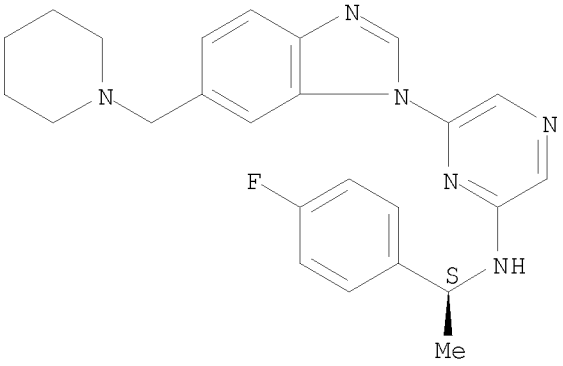
RN 853887-91-9 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-[6-(4-morpholinylmethyl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



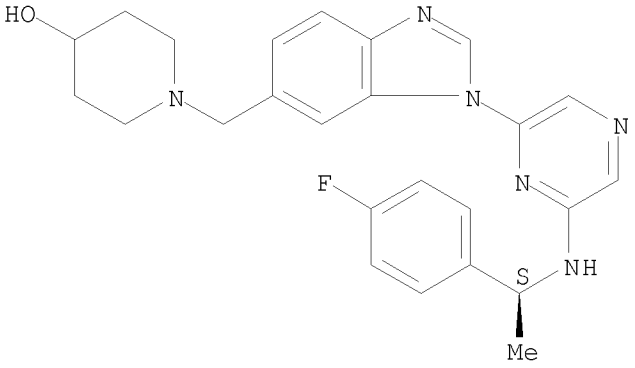
RN 853887-92-0 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-[6-(1-piperidinylmethyl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



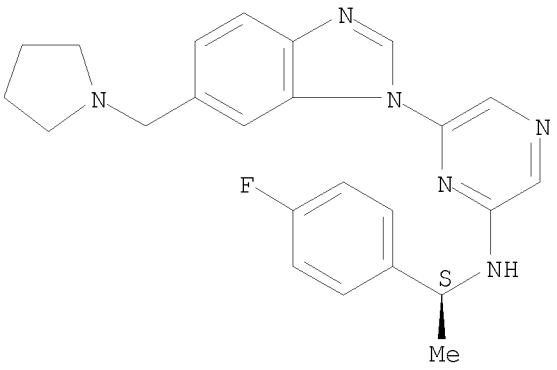
RN 853887-93-1 CAPLUS
CN 4-Piperidinol, 1-[[1-[6-[[(1S)-1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]methyl]- (CA INDEX NAME)

Absolute stereochemistry.



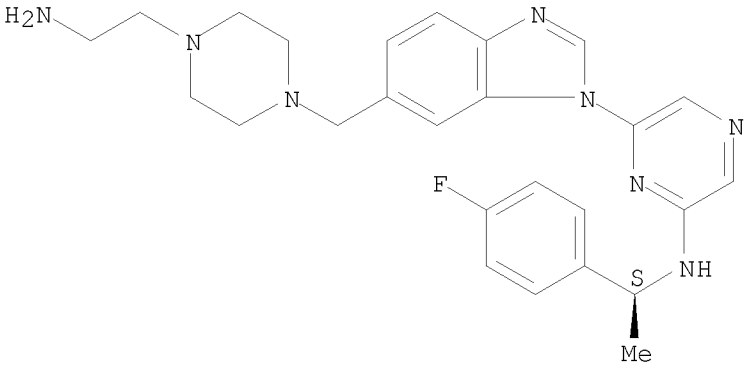
RN 853887-94-2 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-[6-(1-pyrrolidinylmethyl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



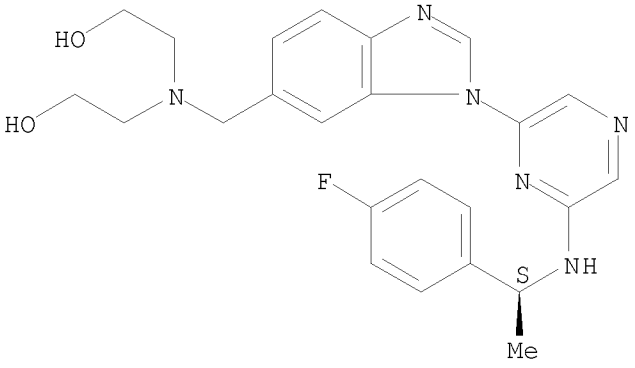
RN 853887-95-3 CAPLUS
CN 2-Pyrazinamine, 6-[6-[[4-(2-aminoethyl)-1-piperazinyl]methyl]-1H-benzimidazol-1-yl]-N-[(1S)-1-(4-fluorophenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



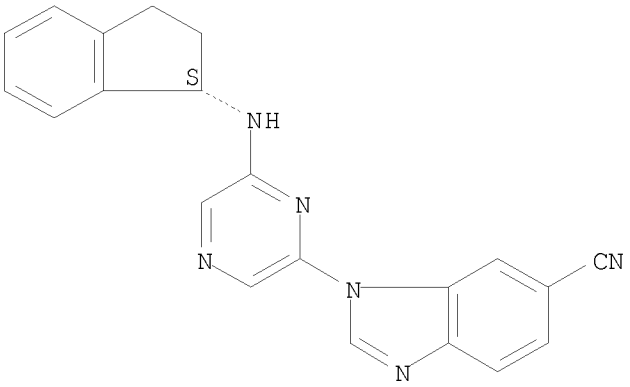
RN 853887-96-4 CAPLUS
CN Ethanol, 2,2'-[[[1-[6-[[(1S)-1-(4-fluorophenyl)ethyl]amino]pyrazinyl]-1H-benzimidazol-6-yl]methyl]imino]bis- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



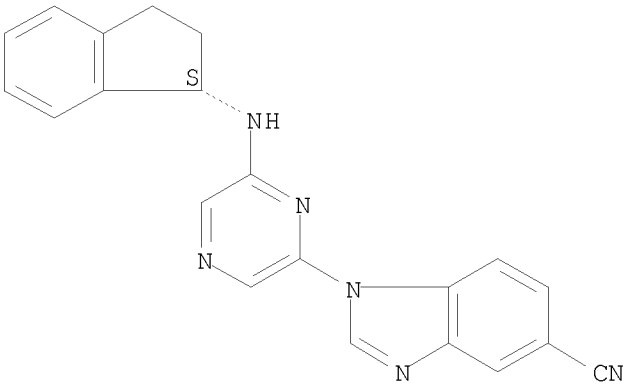
RN 853887-97-5 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-2,3-dihydro-1H-inden-1-yl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

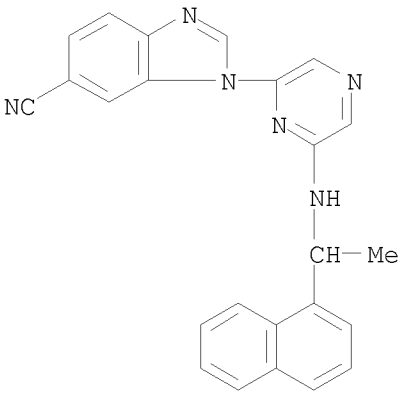


RN 853887-98-6 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[(1S)-2,3-dihydro-1H-inden-1-yl]amino]-2-pyrazinyl]- (CA INDEX NAME)

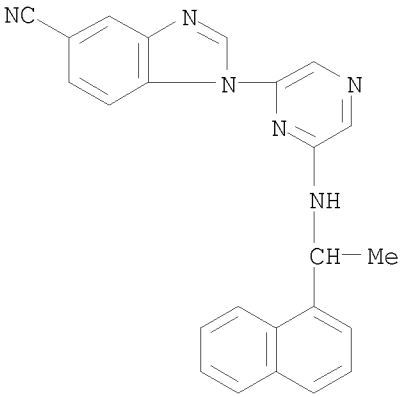
Absolute stereochemistry.



RN 853887-99-7 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-(1-naphthalenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

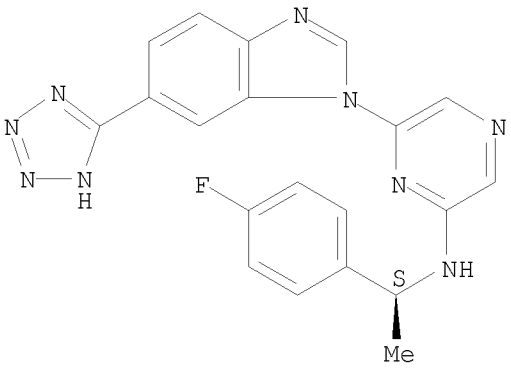


RN 853888-00-3 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(1-naphthalenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



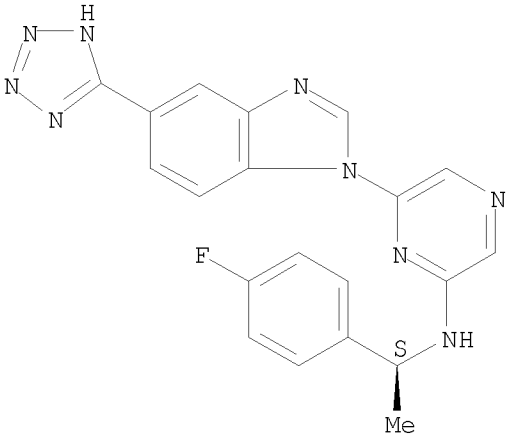
RN 853888-02-5 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-[6-(2H-tetrazol-5-yl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



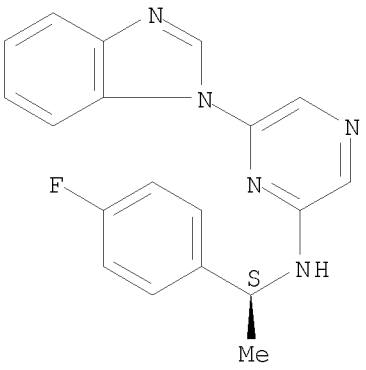
RN 853888-03-6 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-[5-(2H-tetrazol-5-yl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



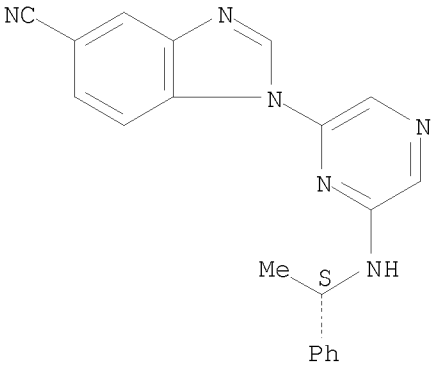
RN 853888-04-7 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-(4-fluorophenyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



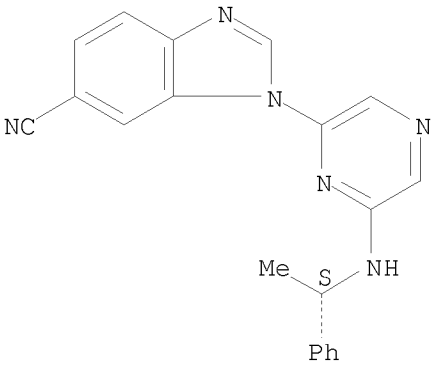
RN 853888-05-8 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



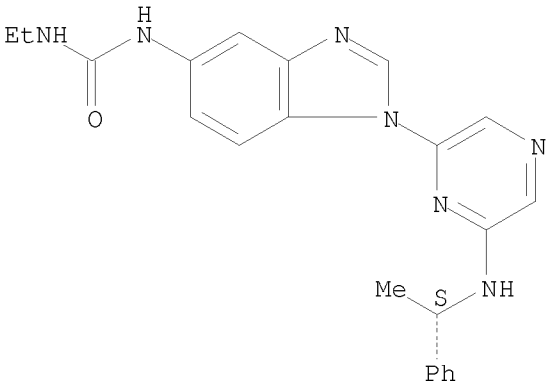
RN 853888-06-9 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

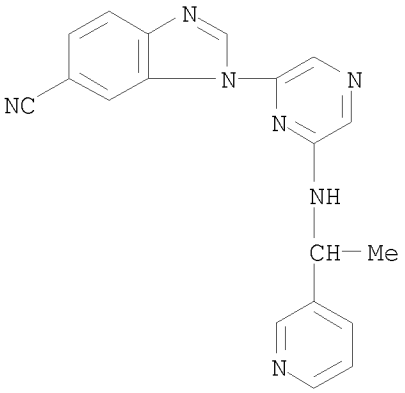


RN 853888-07-0 CAPLUS
CN Urea, N-ethyl-N'-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

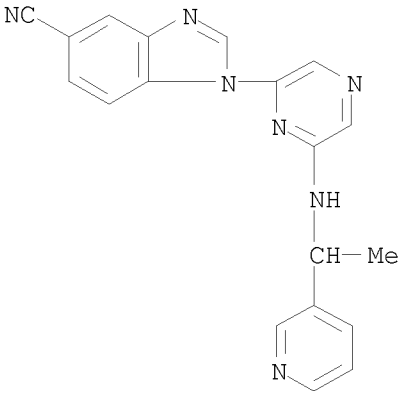
Absolute stereochemistry.



RN 853888-08-1 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-(3-pyridinyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

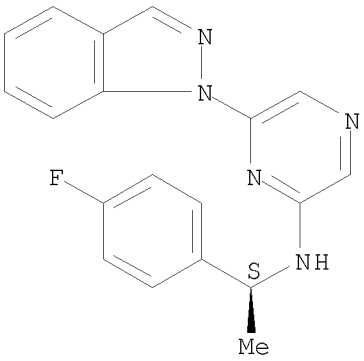


RN 853888-09-2 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(3-pyridinyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

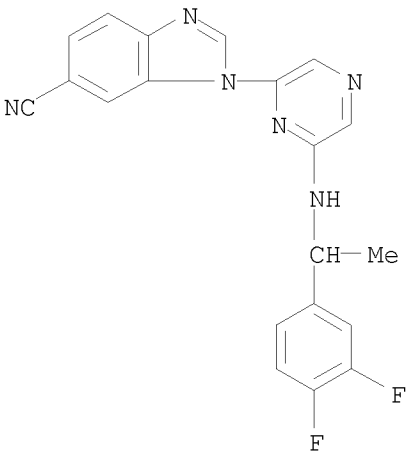


RN 853888-10-5 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-(1H-indazol-1-yl)- (CA INDEX NAME)

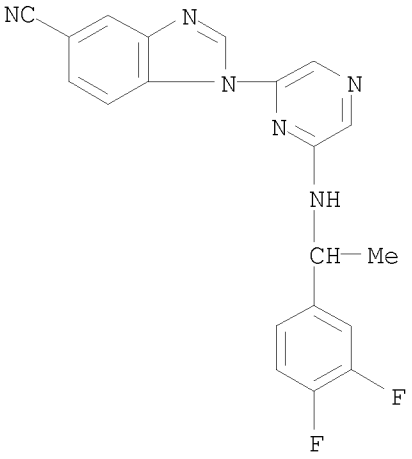
Absolute stereochemistry.



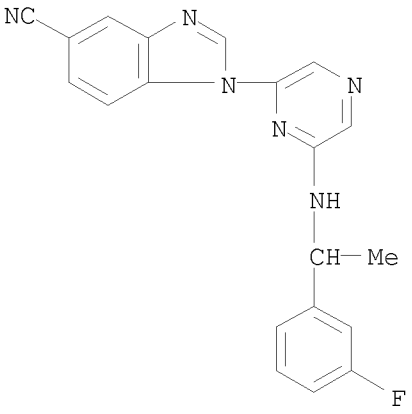
RN 853888-12-7 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-(3,4-difluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



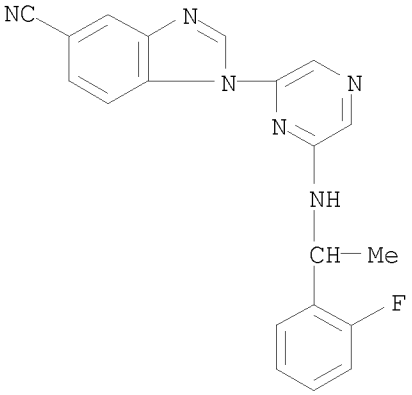
RN 853888-13-8 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(3,4-difluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



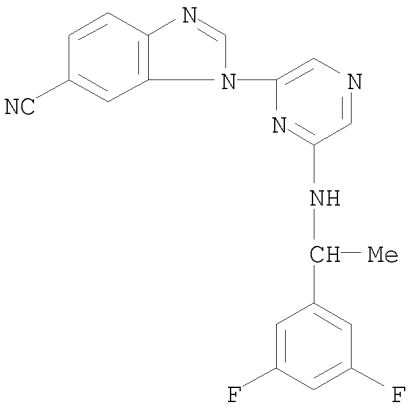
RN 853888-14-9 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(3-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



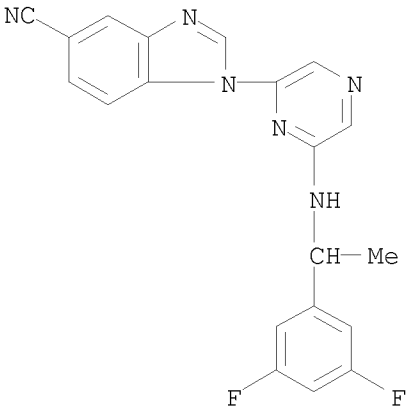
RN 853888-15-0 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(2-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



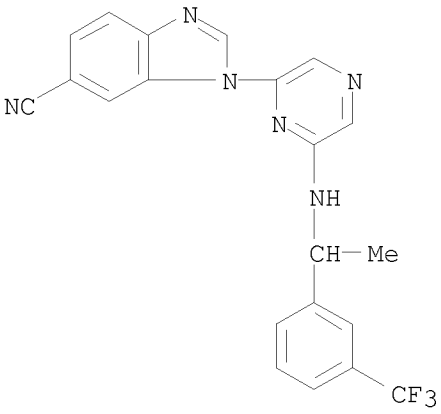
RN 853888-16-1 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-(3,5-difluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



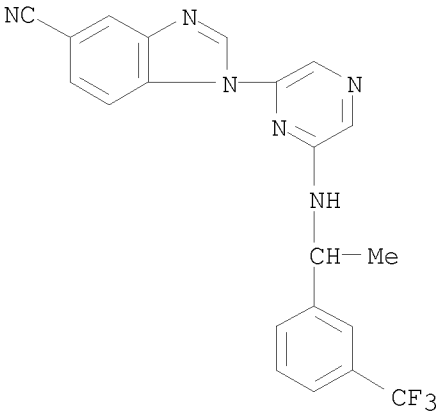
RN 853888-17-2 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(3,5-difluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



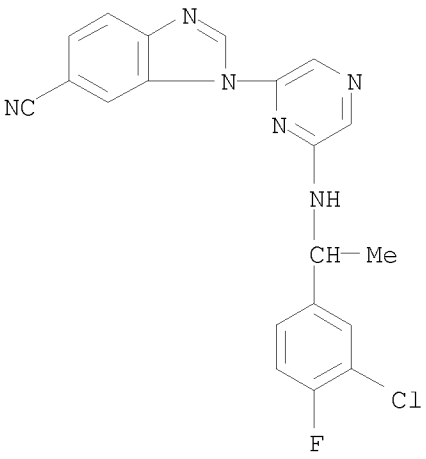
RN 853888-18-3 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-[3-(trifluoromethyl)phenyl]ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



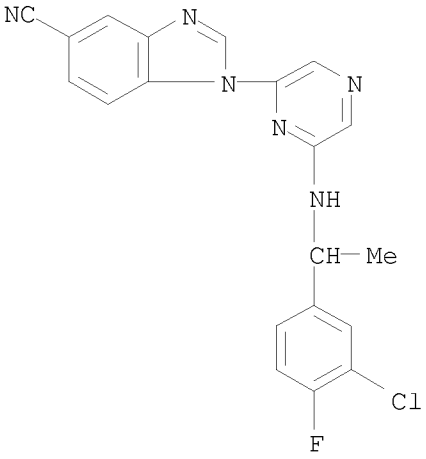
RN 853888-19-4 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-[3-(trifluoromethyl)phenyl]ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



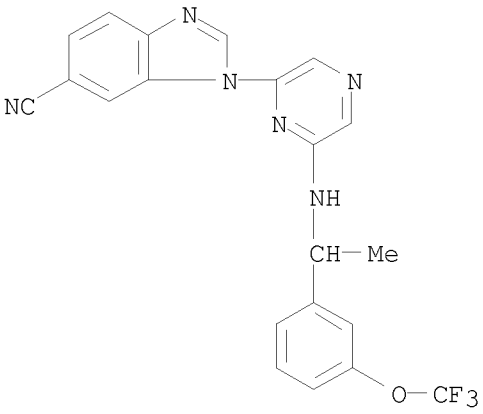
RN 853888-20-7 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-(3-chloro-4-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



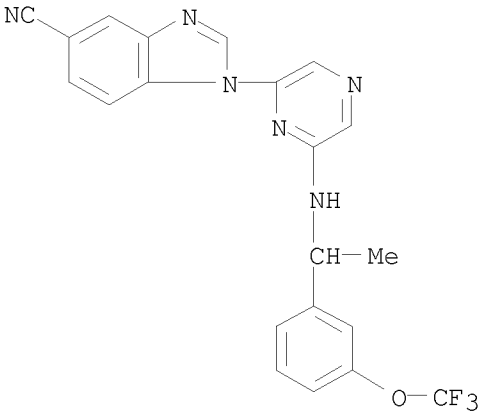
RN 853888-21-8 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(3-chloro-4-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



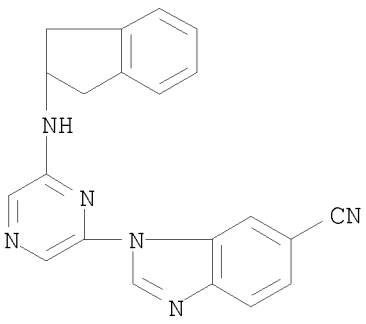
RN 853888-22-9 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-[3-(trifluoromethoxy)phenyl]ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



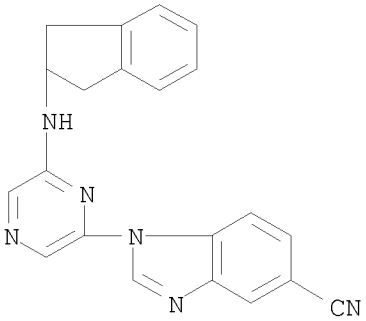
RN 853888-23-0 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-[3-(trifluoromethoxy)phenyl]ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)



RN 853888-24-1 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[(2,3-dihydro-1H-inden-2-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)

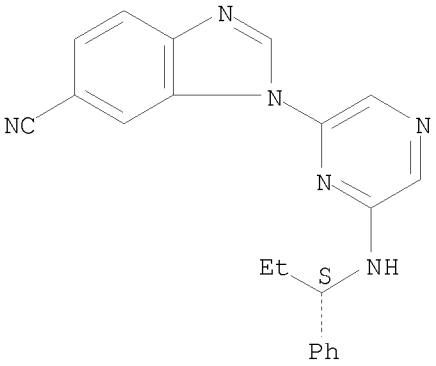


RN 853888-25-2 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[(2,3-dihydro-1H-inden-2-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



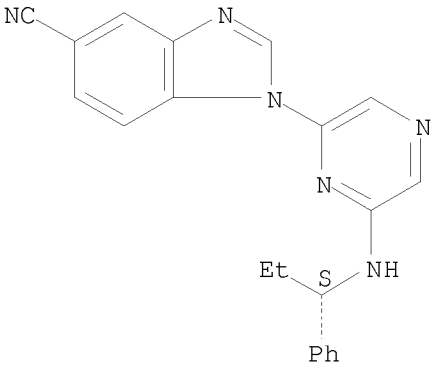
RN 853888-26-3 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1-phenylpropyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



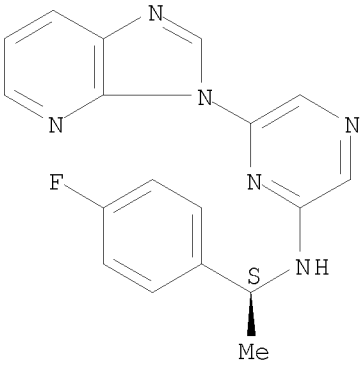
RN 853888-27-4 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[(1S)-1-phenylpropyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



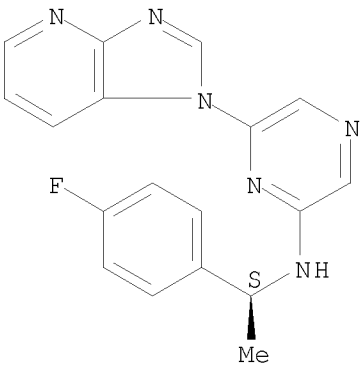
RN 853888-28-5 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-(3H-imidazo[4,5-b]pyridin-3-yl)- (CA INDEX NAME)

Absolute stereochemistry.



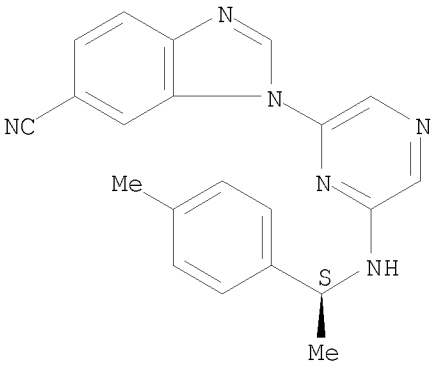
RN 853888-29-6 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-(4-fluorophenyl)ethyl]-6-(1H-imidazo[4,5-b]pyridin-1-yl)- (CA INDEX NAME)

Absolute stereochemistry.



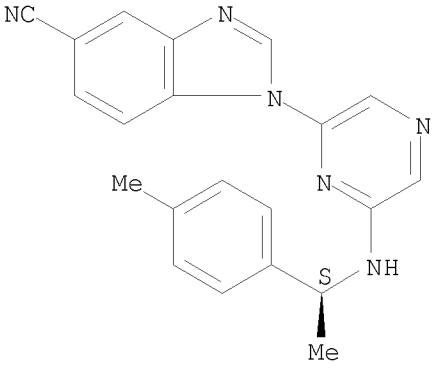
RN 853888-30-9 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1-(4-methylphenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



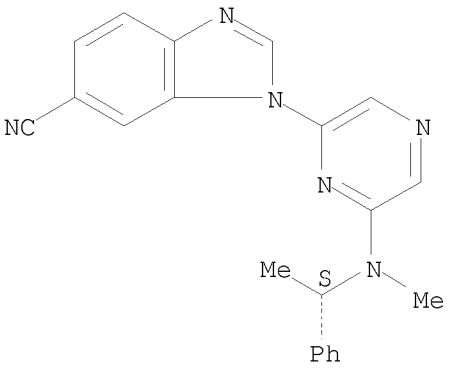
RN 853888-31-0 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[(1S)-1-(4-methylphenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



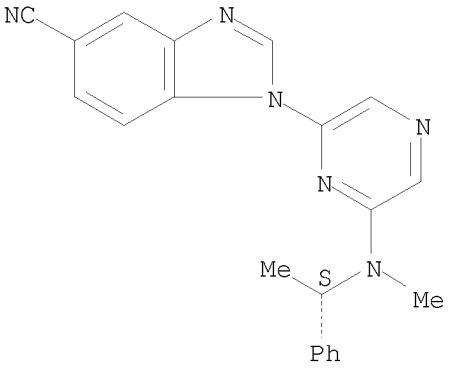
RN 853888-32-1 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[methyl[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



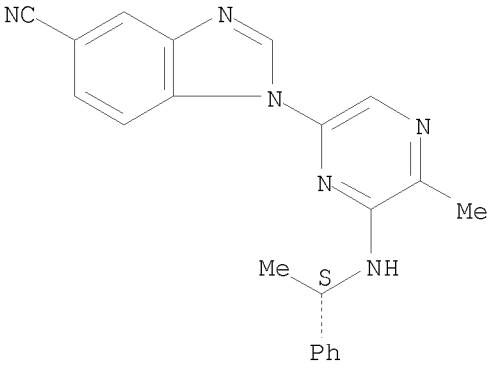
RN 853888-33-2 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[methyl[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



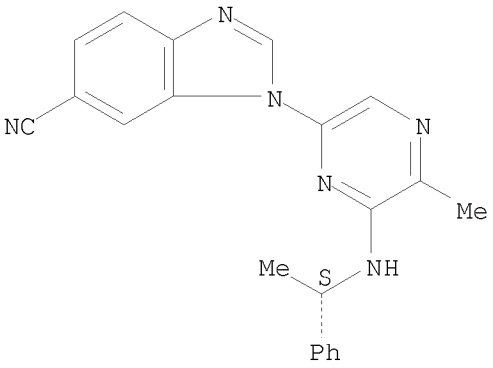
RN 853888-34-3 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[5-methyl-6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

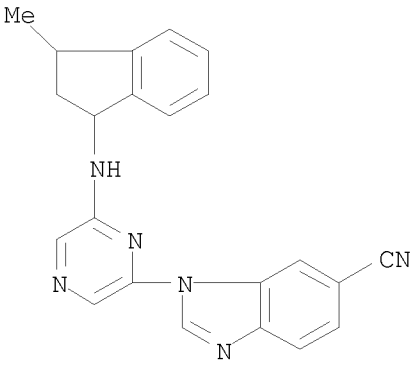


RN 853888-35-4 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[5-methyl-6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

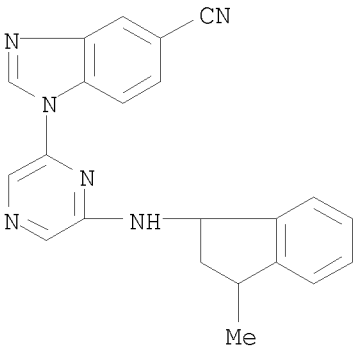
Absolute stereochemistry.



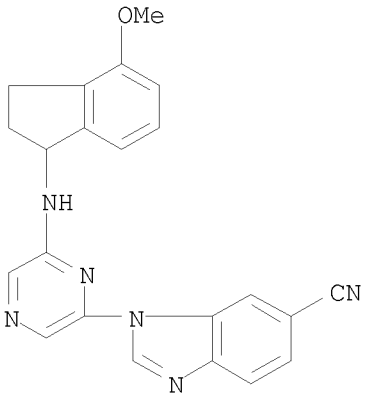
RN 853888-37-6 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[(2,3-dihydro-3-methyl-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



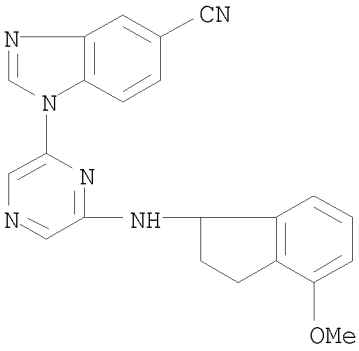
RN 853888-38-7 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[(2,3-dihydro-3-methyl-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



RN 853888-39-8 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[(2,3-dihydro-4-methoxy-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)

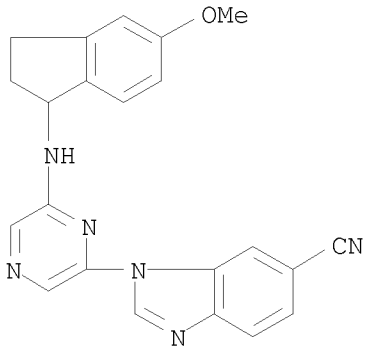


RN 853888-40-1 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[(2,3-dihydro-4-methoxy-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)

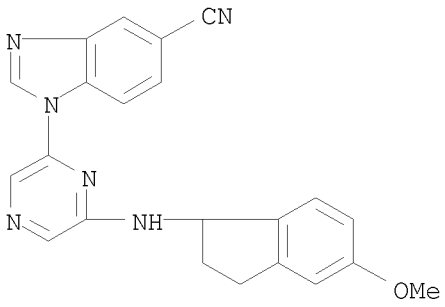


RN 853888-41-2 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[(2,3-dihydro-5-methoxy-1H-inden-1-

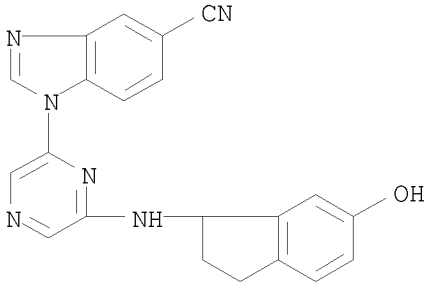
yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



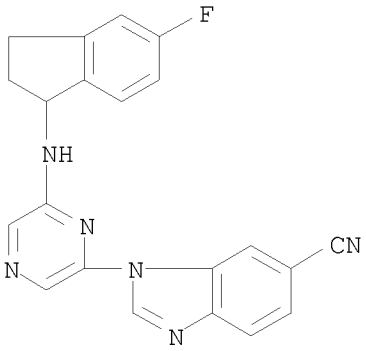
RN 853888-42-3 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[(2,3-dihydro-5-methoxy-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



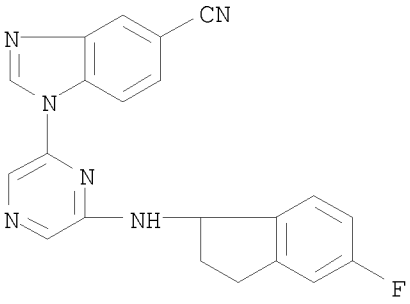
RN 853888-43-4 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[(2,3-dihydro-6-hydroxy-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



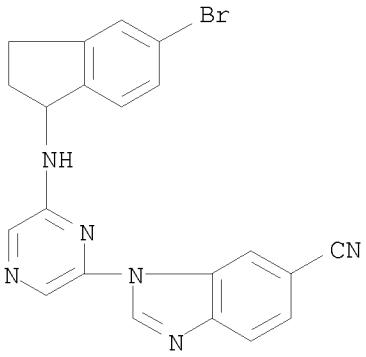
RN 853888-44-5 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[(5-fluoro-2,3-dihydro-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



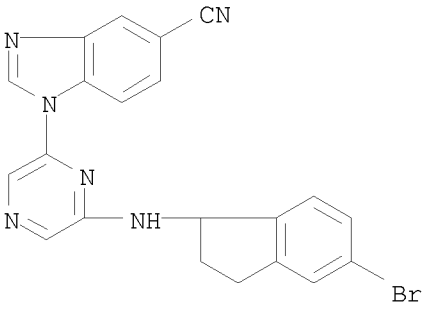
RN 853888-45-6 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[(5-fluoro-2,3-dihydro-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)



RN 853888-46-7 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[(5-bromo-2,3-dihydro-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)

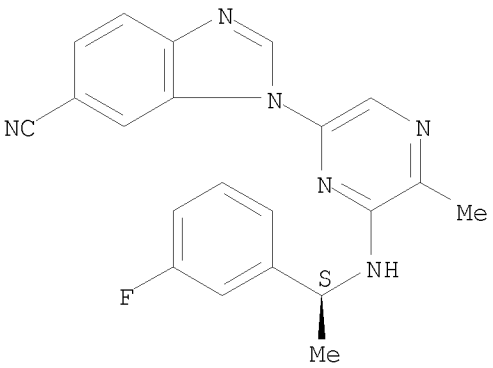


RN 853888-47-8 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[(5-bromo-2,3-dihydro-1H-inden-1-yl)amino]-2-pyrazinyl]- (CA INDEX NAME)

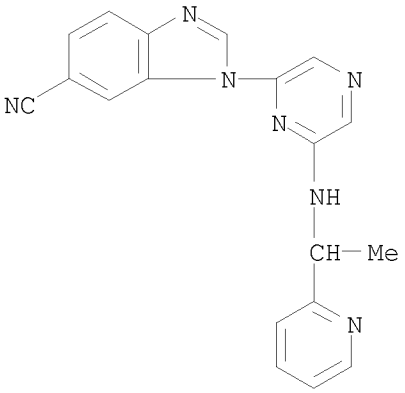


RN 853888-48-9 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[(1S)-1-(3-fluorophenyl)ethyl]amino]-5-methyl-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

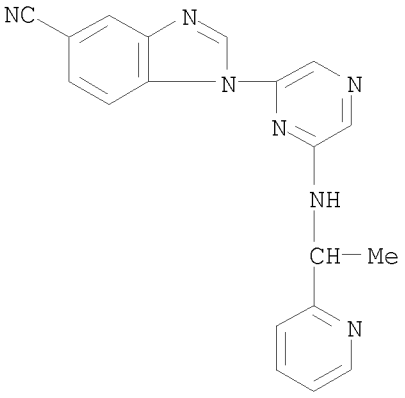


RN 853888-49-0 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-[6-[[1-(2-pyridinyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

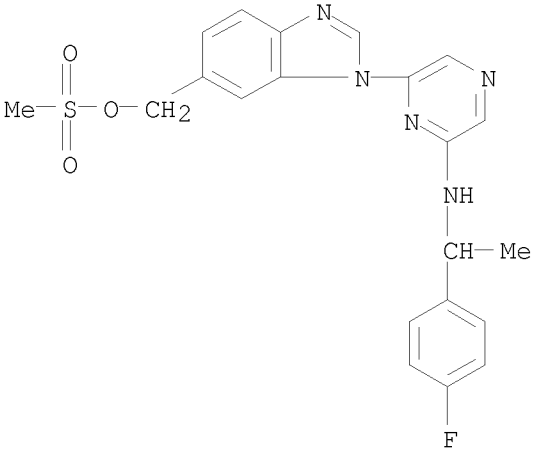


RN 853888-50-3 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-[6-[[1-(2-pyridinyl)ethyl]amino]-2-

pyrazinyl]- (CA INDEX NAME)



IT 853888-56-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrazine derivs. as kinase inhibitors)
RN 853888-56-9 CAPLUS
CN 1H-Benzimidazole-6-methanol, 1-[6-[[1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]-, 6-methanesulfonate (CA INDEX NAME)



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [A = (un)substituted-aryl, -heteroaryl; W, X, Y and Z = (un)substituted carbon, or one of W, X, Y and Z is nitrogen and the rest (un)substituted carbon; Q = bond, CH2, alkyl; R1 = H, alkyl, cycloalkyl, etc.; R2 = H, (un)substituted-alkyl, -alkenyl, etc.; R3 = 0-2 substituents

selected from H, alkyl, NR5R6; R4 independently = H, halo, alkyl, etc.; R5 and R6 independently = H, alkyl] and their pharmaceutically acceptable salts, are prepared and disclosed as kinase inhibitors. Thus, e.g., II was prepared by coupling of (6-chloro-pyrazin-2yl)-(1-benzyl)-amine with benzimidazole. The activity of I was evaluated and it was revealed that selected compds. of the invention displayed an inhibition capacity of 50% or greater at a concentration of 20 μM. I as inhibitors of kinases should prove useful in the treatment of diseases such as, but not limited to, rheumatic, viral and cardiovascular diseases. Pharmaceutical compns. comprising I are disclosed.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:951019 CAPLUS
DOCUMENT NUMBER: 140:16748
TITLE: Preparation of imidazolylpyrazines as protein kinase inhibitors for treatment of receptor type tyrosine kinase-related diseases
INVENTOR(S): Wilks, Andrew Fredrick; Bu, Xianyong; Burns, Christopher John
PATENT ASSIGNEE(S): Cytopia Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003099811	A1	20031204	WO 2003-AU628	20030523
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2003229370	A1	20031212	AU 2003-229370	20030523
GB 2398781	A	20040901	GB 2003-18343	20030523
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EP 1511742	A1	20050309	EP 2003-722065	20030523
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US 20060241112	A1	20061026	US 2006-397973	20060404
US 20060270687	A1	20061130	US 2006-397982	20060404
US 20070161635	A1	20070712	US 2007-711957	20070227

PRIORITY APPLN. INFO.:	AU 2002-2514	A	20020523
	US 2002-398998P	P	20020726
	WO 2003-AU628	W	20030523
	US 2003-472156	A3	20030919

OTHER SOURCE(S): MARPAT 140:16748
IT 629669-29-0P, 6-(1H-Benzimidazol-1-yl)-N-((1R)-1-phenylethyl)pyrazin-2-amine 629669-31-4P, 6-(1H-Benzimidazol-1-yl)-N-[(1S)-1-(4-methoxyphenyl)ethyl]pyrazin-2-amine 629669-33-6P, 6-(1H-Benzimidazol-1-yl)-N-[(1S)-1-(4-bromophenyl)ethyl]pyrazin-2-amine 629669-35-8P, 1-[6-[[(1S)-1-Phenylethyl]amino]pyrazin-2-yl]-1H-benzimidazole-6-

carboxamide 629669-36-9P,
6-(1H-Benzimidazol-1-yl)-N-benzylpyrazin-2-amine 629669-37-0P,
1-[6-[[(1S)-1-Phenylethyl]amino]pyrazin-2-yl]-1H-benzimidazole-5-carboxamide 629669-38-1P,
6-(1H-Benzimidazol-1-yl)-N-(4-fluorobenzyl)pyrazin-2-amine 629669-39-2P 629669-40-5P 629669-41-6P 629669-43-8P, N-[1-[6-[[(1S)-1-Phenylethyl]amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]cyclopropanecarboxamide 629669-44-9P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]nicotinamide 629669-45-0P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]cyclopropanecarboxamide 629669-46-1P,
6-[6-(4,5-Dihydro-1,3-oxazol-2-yl)-1H-benzimidazol-1-yl]-N-[(1S)-1-phenylethyl]pyrazin-2-amine 629669-48-3P,
1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-N-(2-hydroxyethyl)-1H-benzimidazole-6-carboxamide 629669-49-4P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]methanesulfonamide 629669-50-7P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]methanesulfonamide 629669-51-8P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]isonicotinamide 629669-53-0P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]isonicotinamide 629669-54-1P,
6-(1H-Benzimidazol-1-yl)-N-((1S)-1-phenylethyl)pyrazin-2-amine 629669-55-2P, 6-[5-(4,5-Dihydro-1,3-oxazol-2-yl)-1H-benzimidazol-1-yl]-N-((1S)-1-phenylethyl)pyrazin-2-amine 629669-56-3P,
1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-N-(2-hydroxyethyl)-1H-benzimidazole-5-carboxamide 629669-57-4P,
6-(5-Methyl-1H-benzimidazol-1-yl)-N-((1S)-1-phenylethyl)pyrazin-2-amine 629669-58-5P, N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]nicotinamide 629669-59-6P,
N-Methyl-1-[6-[((1S)-1-phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazole-5-carboxamide 629669-60-9P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]-2,2-dimethylpropanamide 629669-61-0P,
N-Methyl-1-[6-[((1S)-1-phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazole-6-carboxamide 629669-62-1P,
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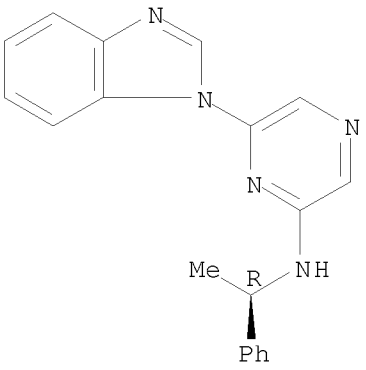
1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-amine 629669-64-3P, 2-Methoxy-N-[1-[6-[((1S)-1-phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]acetamide 629669-65-4P,
1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-amine 629669-66-5P, 2-Methoxy-N-[1-[6-[((1S)-1-phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]acetamide 629669-67-6P,
N-Benzyl-1-[6-[((1S)-1-phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazole-5-carboxamide 629669-68-7P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]pyrazine-2-carboxamide 629669-69-8P,
1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-N-phenyl-1H-benzimidazole-5-carboxamide 629669-70-1P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]pyrazine-2-carboxamide 629669-71-2P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]acetamide 629669-72-3P,
6-[5-[(4-Methylpiperazin-1-yl)methyl]-1H-benzimidazol-1-yl]-N-((1S)-1-

phenylethyl)pyrazin-2-amine 629669-73-4P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]acetamide 629669-74-5P,
[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]methanol 629669-75-6P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]benzamide 629669-76-7P,
[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-6-yl]methanol 629669-77-8P,
N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]benzamide 629669-78-9P,
1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-N-[2-(dimethylamino)ethyl]-1H-benzimidazole-5-carboxamide 629669-79-0P,
1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-N-(pyridin-3-ylmethyl)-1H-benzimidazol-5-amine 629669-80-3P, tert-Butyl
(2S)-2-[[[1-[6-[((1S)-1-phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]amino]carbonyl]pyrrolidine-1-carboxylate 629669-81-4P,
6-(3H-Imidazo[4,5-c]pyridin-3-yl)-N-[(1s)-1-phenylethyl]pyrazin-2-amine 629669-82-5P, 6-(1H-Benzimidazol-1-yl)-N-[1-(4-fluorophenyl)ethyl]pyrazin-2-amine 629669-83-6P,
6-(1H-Imidazo[4,5-c]pyridin-1-yl)-N-[(1S)-1-phenylethyl]pyrazin-2-amine 629669-84-7P 629669-85-8P,
(2S)-N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]pyrrolidine-2-carboxamide 629669-86-9P,
N-((1S)-1-Phenylethyl)-6-(5-pyridin-4-yl-1H-benzimidazol-1-yl)pyrazin-2-amine 629669-87-0P, N-((1S)-1-Phenylethyl)-6-(5-pyridin-3-yl-1H-benzimidazol-1-yl)pyrazin-2-amine 629669-88-1P,
6-(5-Bromo-1H-benzimidazol-1-yl)-N-((1S)-1-phenylethyl)pyrazin-2-amine 629669-89-2P, N-[3-(1H-Imidazol-1-yl)propyl]-1-[6-[((1S)-1-phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazole-6-carboxamide 629669-90-5P 629669-91-6P 629669-92-7P
629669-93-8P, 6-(1H-Benzimidazol-1-yl)-N-((1S)-1-pyridin-3-ylethyl)pyrazin-2-amine 629669-94-9P,
6-(1H-Benzimidazol-1-yl)-N-[(1S)-1-(1,1'-biphenyl-4-yl)ethyl]pyrazin-2-amine 629669-95-0P, N-[1-[6-[((1S)-1-Phenylethyl)amino]pyrazin-2-yl]-1H-benzimidazol-5-yl]benzenesulfonamide 629670-01-5P
629670-03-7P 629670-04-8P 629670-05-9P
629670-06-0P 629670-07-1P 629670-08-2P
629670-09-3P 629670-10-6P 629670-11-7P
629670-12-8P 629670-13-9P 629670-14-0P
629670-17-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of imidazolylpyrazines as protein kinase inhibitors for treatment of receptor type tyrosine kinase-related diseases)

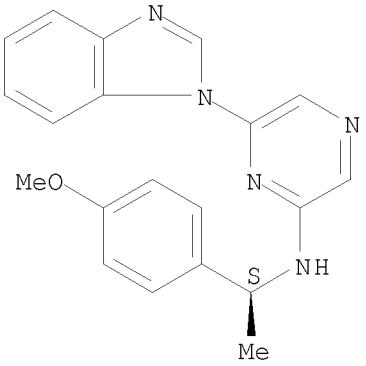
RN 629669-29-0 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



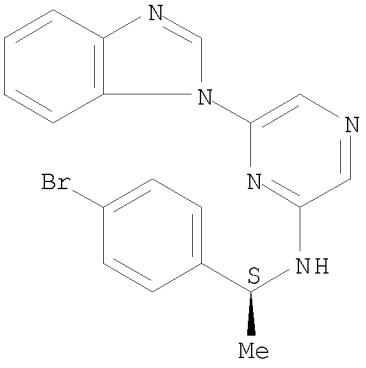
RN 629669-31-4 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-(4-methoxyphenyl)ethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



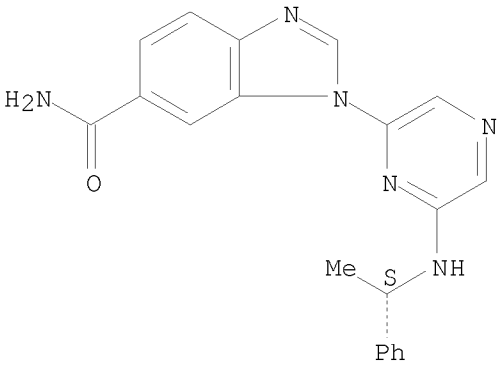
RN 629669-33-6 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-(4-bromophenyl)ethyl]-
(CA INDEX NAME)

Absolute stereochemistry.

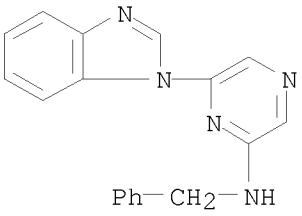


RN 629669-35-8 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

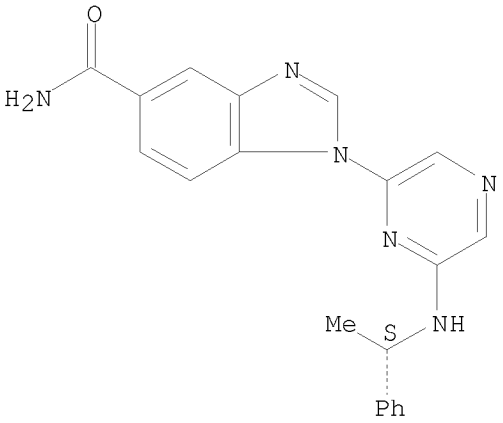


RN 629669-36-9 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-(phenylmethyl)- (CA INDEX NAME)

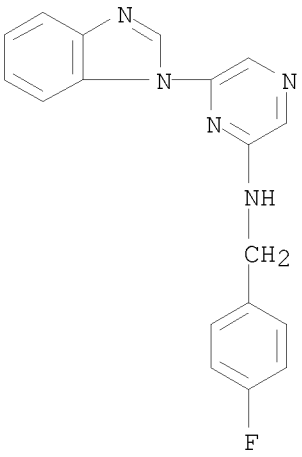


RN 629669-37-0 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.

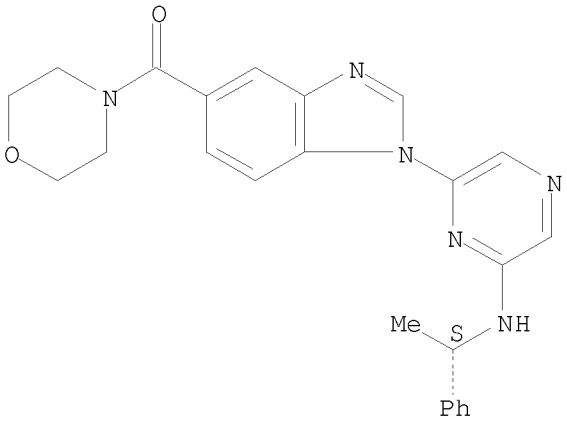


RN 629669-38-1 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(4-fluorophenyl)methyl]- (CA INDEX NAME)



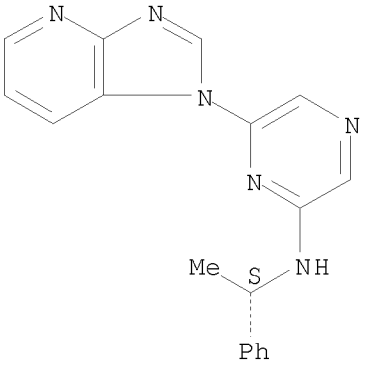
RN 629669-39-2 CAPLUS
CN Methanone, 4-morpholinyl[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



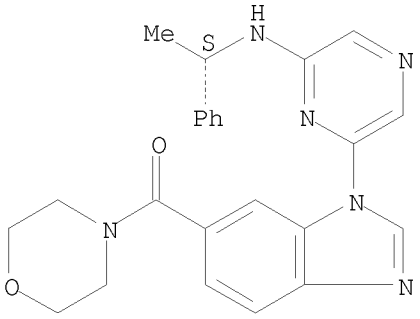
RN 629669-40-5 CAPLUS
CN 2-Pyrazinamine, 6-(1H-imidazo[4,5-b]pyridin-1-yl)-N-[(1S)-1-phenylethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



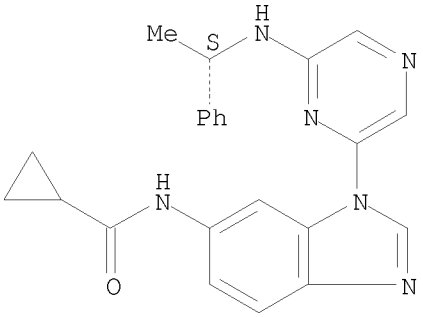
RN 629669-41-6 CAPLUS
CN Methanone, 4-morpholinyl[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-
benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



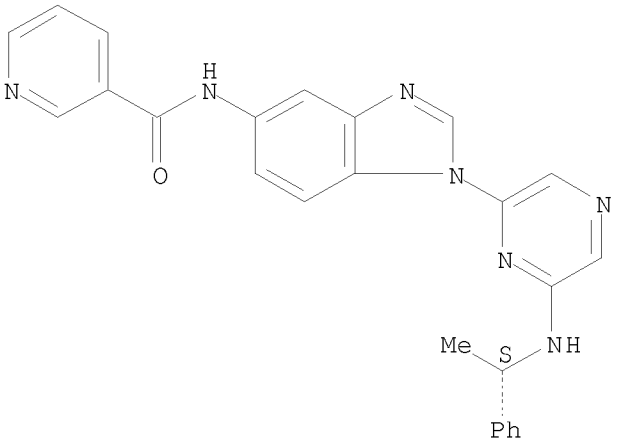
RN 629669-43-8 CAPLUS
CN Cyclopropanecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



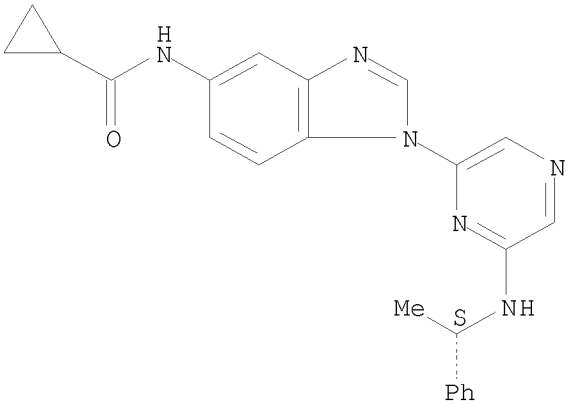
RN 629669-44-9 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



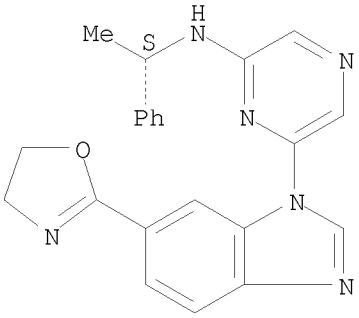
RN 629669-45-0 CAPLUS
CN Cyclopropanecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



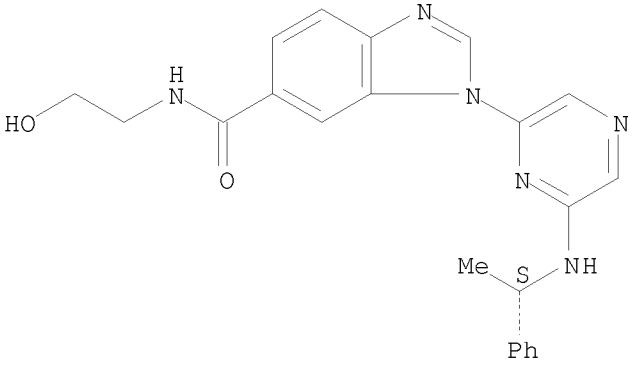
RN 629669-46-1 CAPLUS
CN 2-Pyrazinamine, 6-[6-(4,5-dihydro-2-oxazolyl)-1H-benzimidazol-1-yl]-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



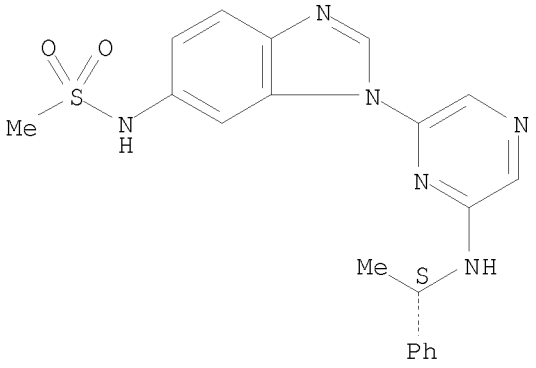
RN 629669-48-3 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, N-(2-hydroxyethyl)-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



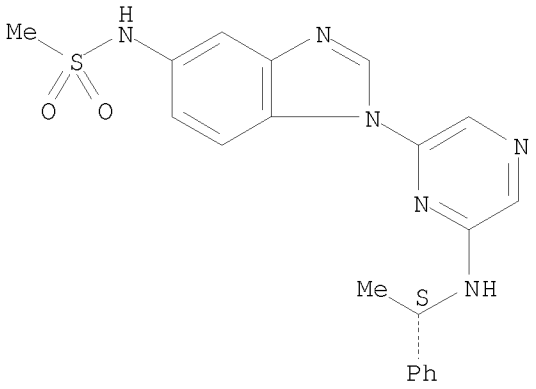
RN 629669-49-4 CAPLUS
CN Methanesulfonamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



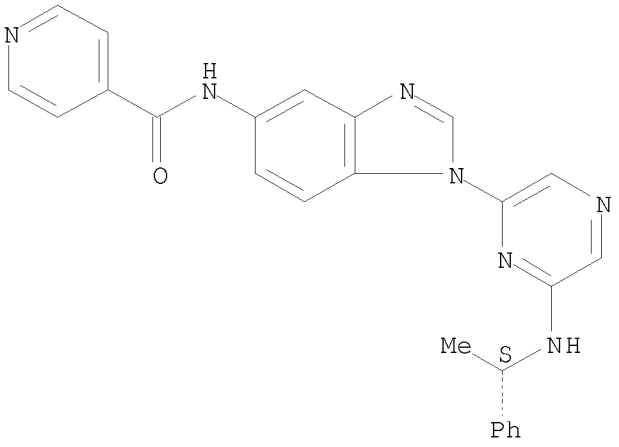
RN 629669-50-7 CAPLUS
CN Methanesulfonamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



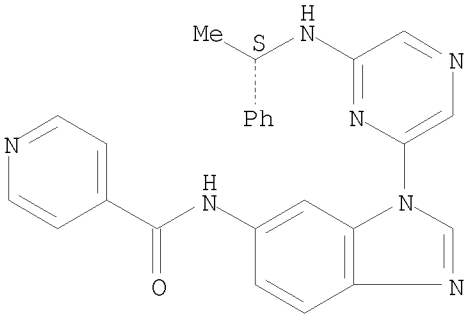
RN 629669-51-8 CAPLUS
CN 4-Pyridinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



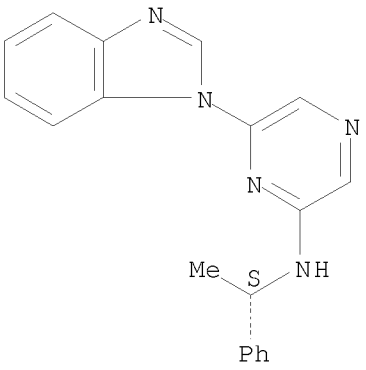
RN 629669-53-0 CAPLUS
CN 4-Pyridinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]pyrazinyl]-1H-benzimidazol-6-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



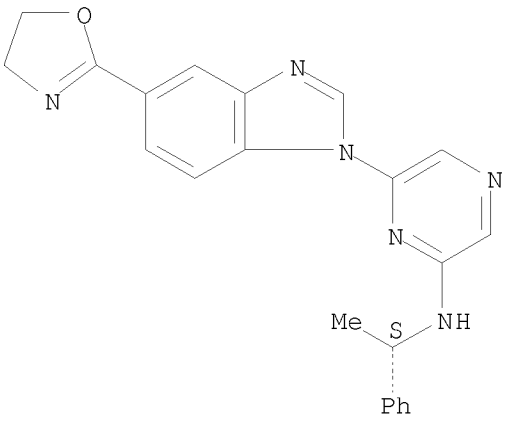
RN 629669-54-1 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



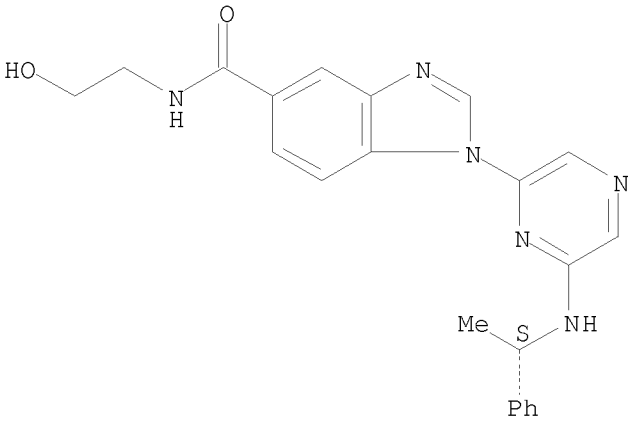
RN 629669-55-2 CAPLUS
CN 2-Pyrazinamine, 6-[5-(4,5-dihydro-2-oxazolyl)-1H-benzimidazol-1-yl]-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



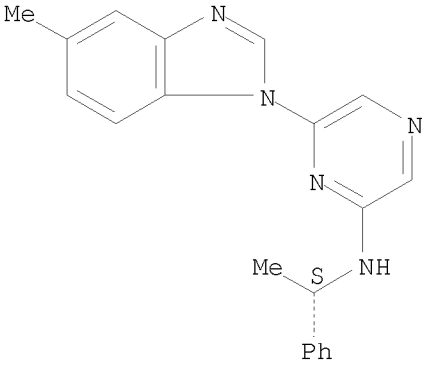
RN 629669-56-3 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-(2-hydroxyethyl)-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



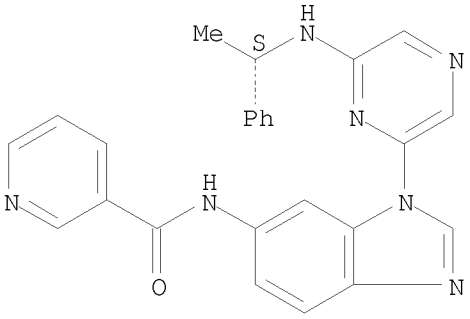
RN 629669-57-4 CAPLUS
CN 2-Pyrazinamine, 6-(5-methyl-1H-benzimidazol-1-yl)-N-[(1S)-1-phenylethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



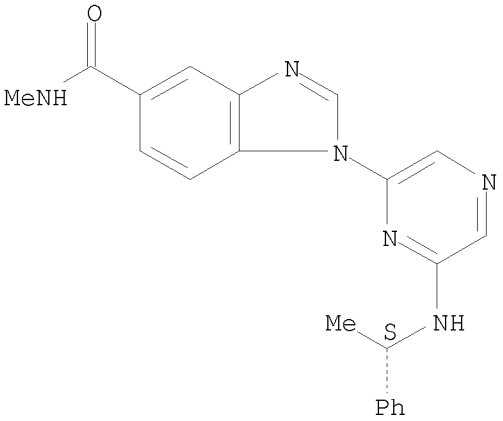
RN 629669-58-5 CAPLUS
CN 3-Pyridinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-
benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



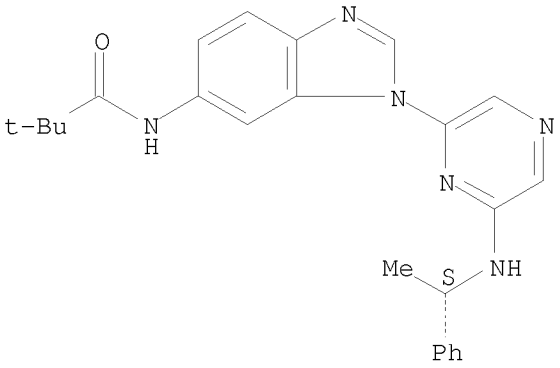
RN 629669-59-6 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-methyl-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



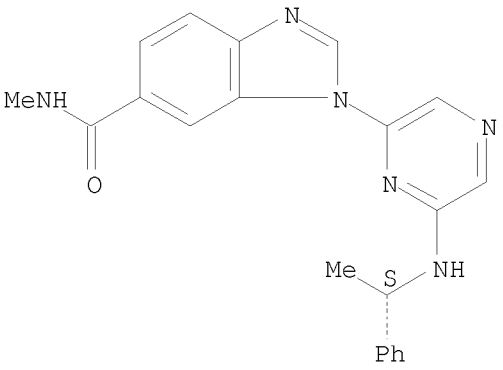
RN 629669-60-9 CAPLUS
CN Propanamide, 2,2-dimethyl-N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



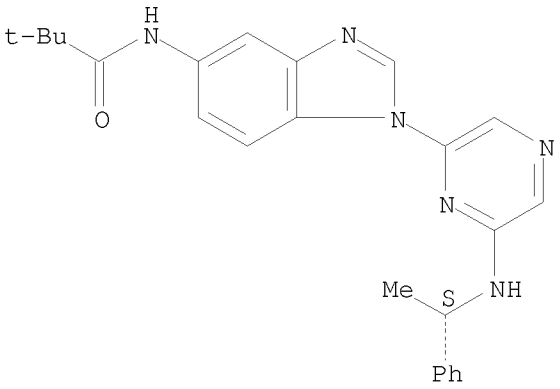
RN 629669-61-0 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, N-methyl-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



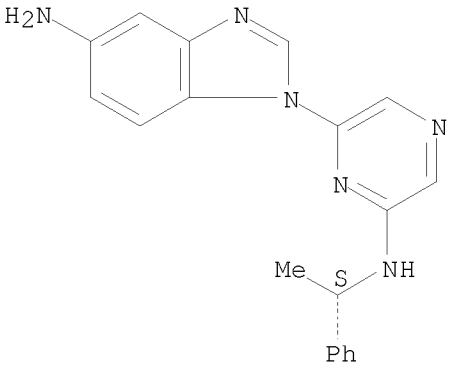
RN 629669-62-1 CAPLUS
CN Propanamide, 2,2-dimethyl-N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



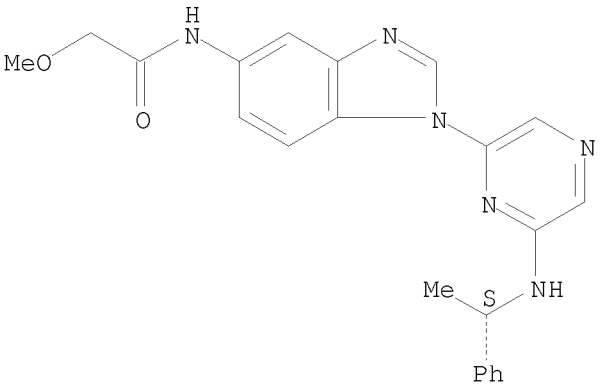
RN 629669-63-2 CAPLUS
CN 1H-Benzimidazol-5-amine, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



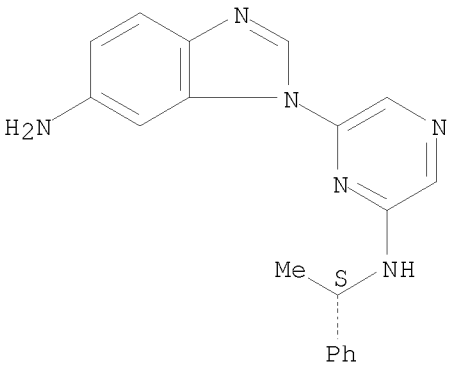
RN 629669-64-3 CAPLUS
CN Acetamide, 2-methoxy-N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



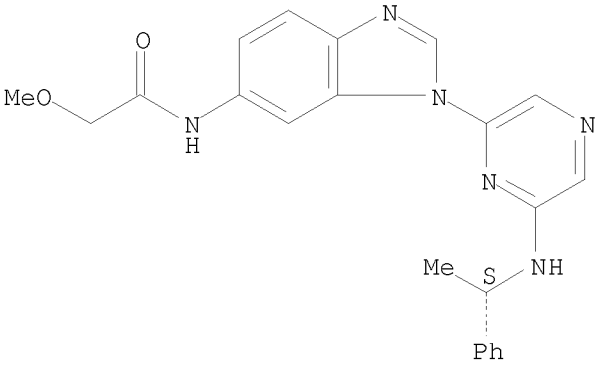
RN 629669-65-4 CAPLUS
CN 1H-Benzimidazol-6-amine, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



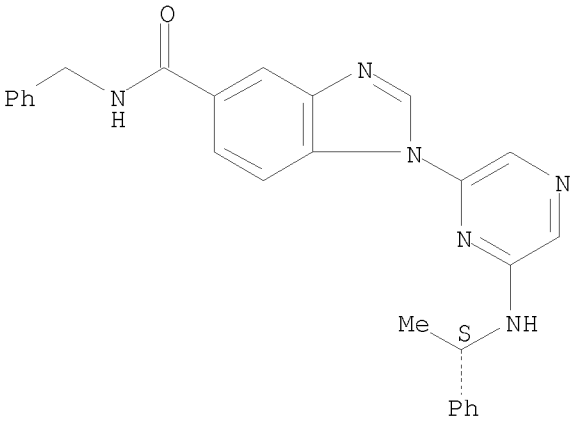
RN 629669-66-5 CAPLUS
CN Acetamide, 2-methoxy-N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



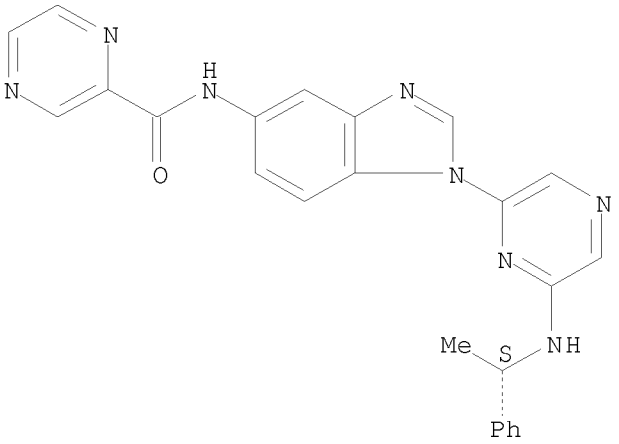
RN 629669-67-6 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-N-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



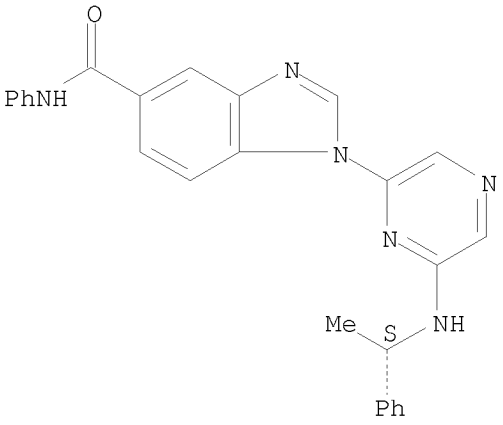
RN 629669-68-7 CAPLUS
CN 2-Pyrazinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



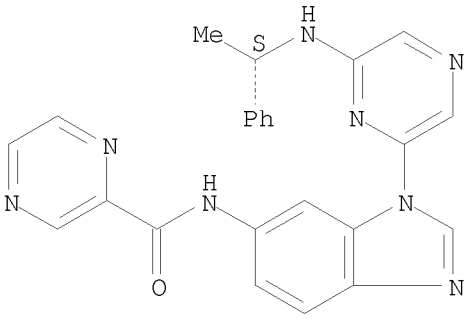
RN 629669-69-8 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-phenyl-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



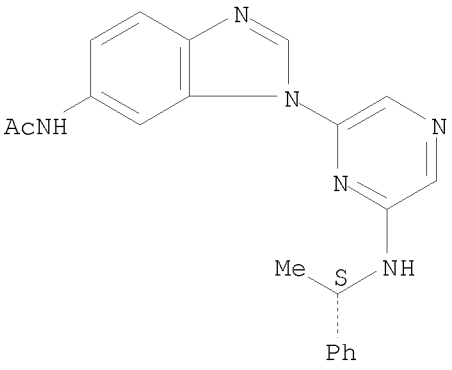
RN 629669-70-1 CAPLUS
CN 2-Pyrazinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



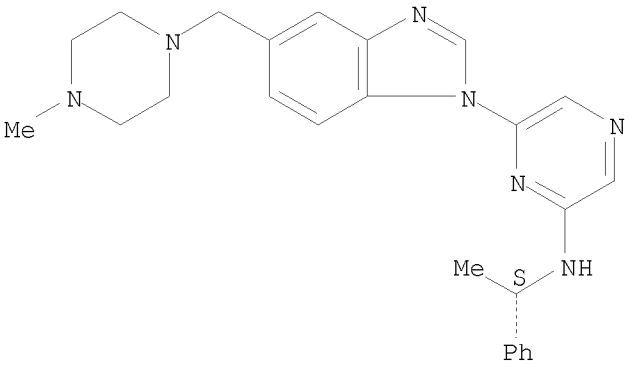
RN 629669-71-2 CAPLUS
CN Acetamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



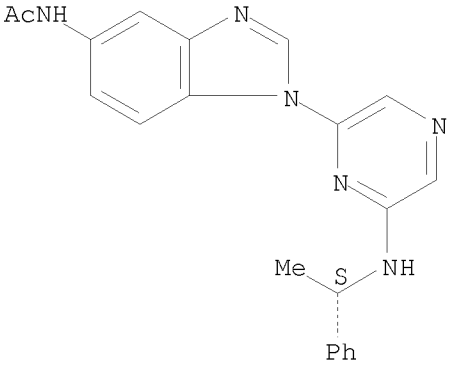
RN 629669-72-3 CAPLUS
CN 2-Pyrazinamine, 6-[5-[(4-methyl-1-piperazinyl)methyl]-1H-benzimidazol-1-yl]-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



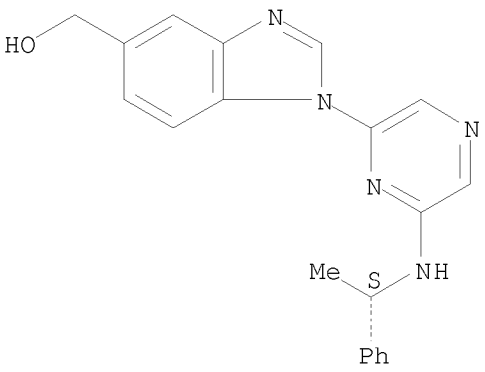
RN 629669-73-4 CAPLUS
CN Acetamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



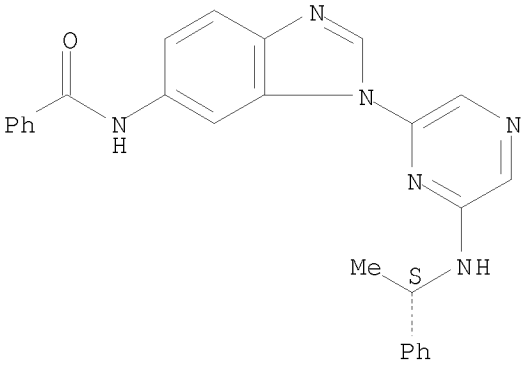
RN 629669-74-5 CAPLUS
CN 1H-Benzimidazole-5-methanol, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



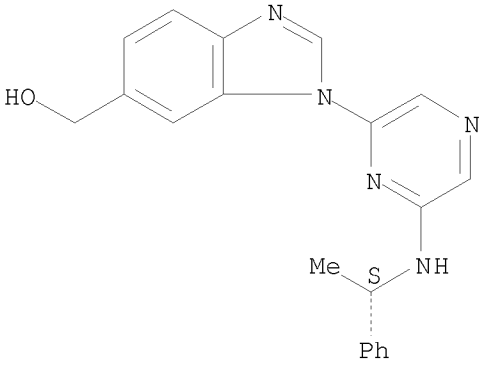
RN 629669-75-6 CAPLUS
CN Benzamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



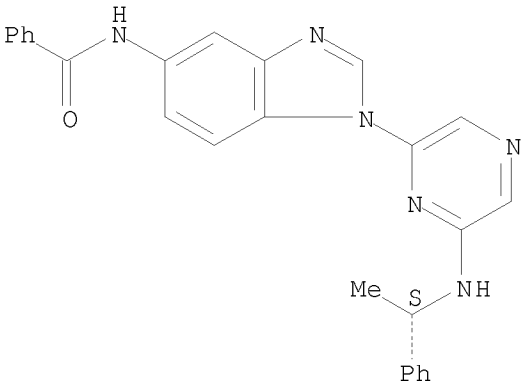
RN 629669-76-7 CAPLUS
CN 1H-Benzimidazole-6-methanol, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



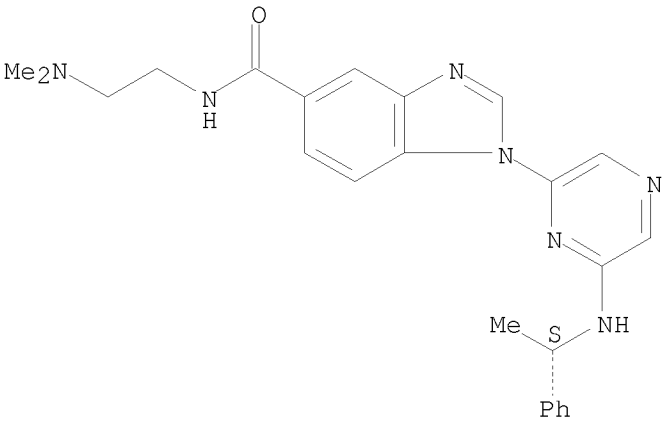
RN 629669-77-8 CAPLUS
CN Benzamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



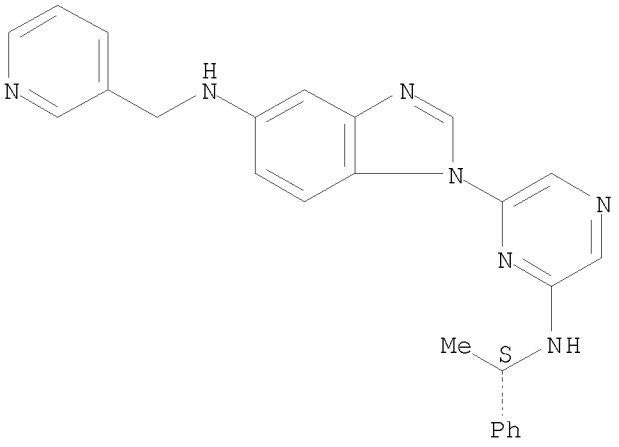
RN 629669-78-9 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-[2-(dimethylamino)ethyl]-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



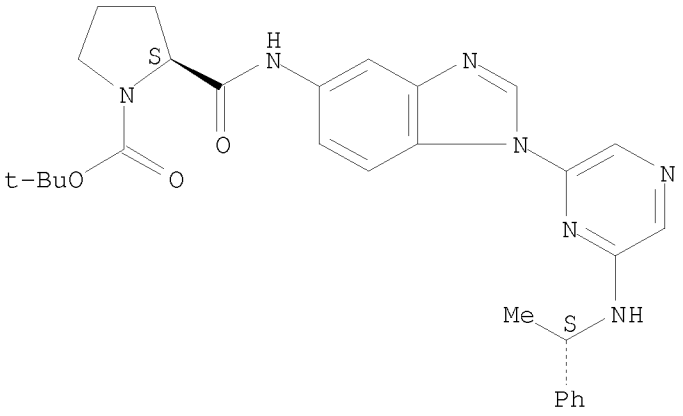
RN 629669-79-0 CAPLUS
CN 1H-Benzimidazol-5-amine, 1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-N-(3-pyridinylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



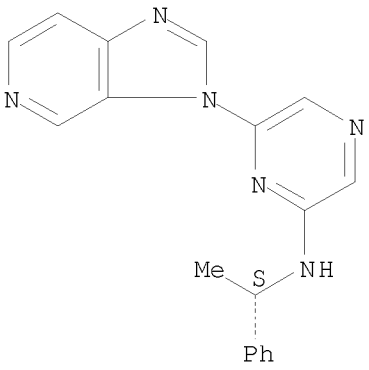
RN 629669-80-3 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[[[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]amino]carbonyl]-, 1,1-dimethylethyl ester, (2S)- (CA INDEX NAME)

Absolute stereochemistry.

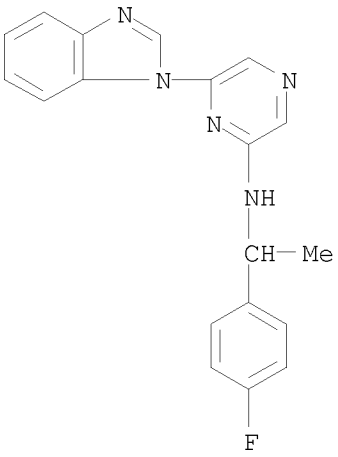


RN 629669-81-4 CAPLUS
CN 2-Pyrazinamine, 6-(3H-imidazo[4,5-c]pyridin-3-yl)-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

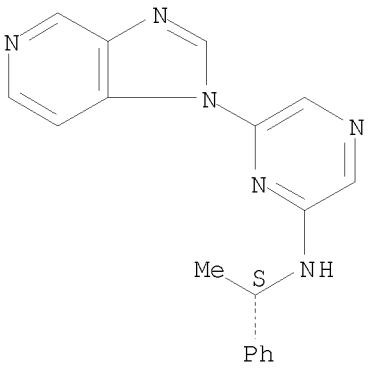


RN 629669-82-5 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[1-(4-fluorophenyl)ethyl]- (CA INDEX NAME)



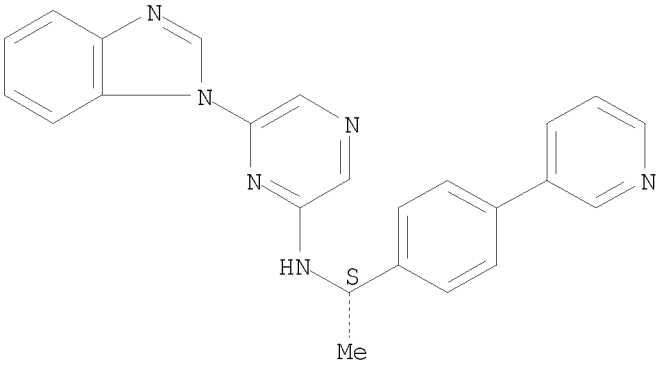
RN 629669-83-6 CAPLUS
CN 2-Pyrazinamine, 6-(1H-imidazo[4,5-c]pyridin-1-yl)-N-[(1S)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



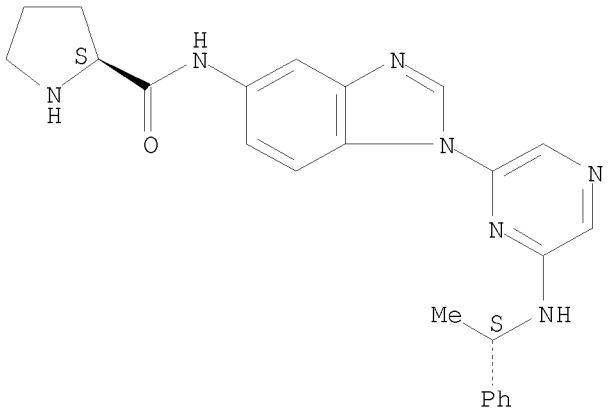
RN 629669-84-7 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-[4-(3-pyridinyl)phenyl]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



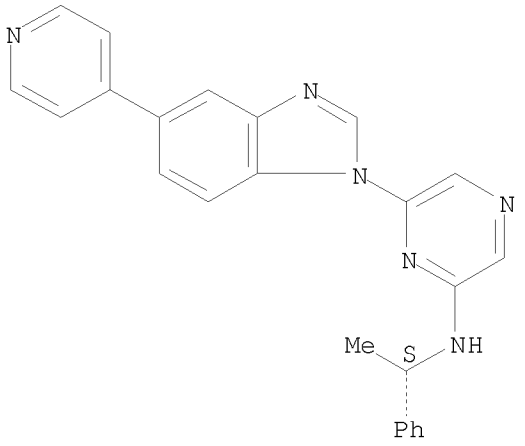
RN 629669-85-8 CAPLUS
CN 2-Pyrrolidinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]-, (2S)- (CA INDEX NAME)

Absolute stereochemistry.



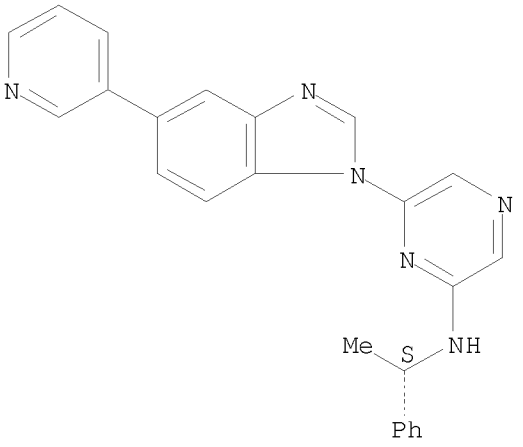
RN 629669-86-9 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-phenylethyl]-6-[5-(4-pyridinyl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



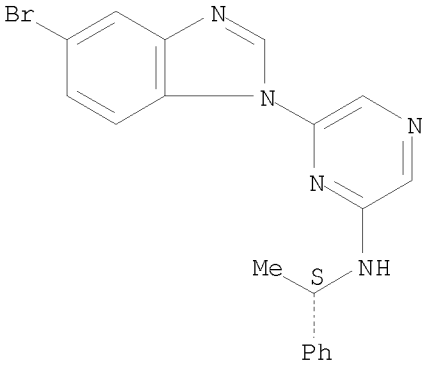
RN 629669-87-0 CAPLUS
CN 2-Pyrazinamine, N-[(1S)-1-phenylethyl]-6-[5-(3-pyridinyl)-1H-benzimidazol-1-yl]- (CA INDEX NAME)

Absolute stereochemistry.



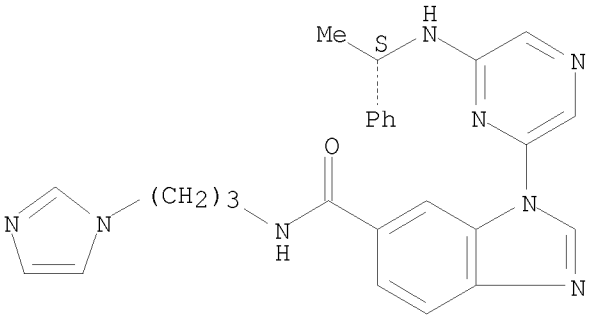
RN 629669-88-1 CAPLUS
CN 2-Pyrazinamine, 6-(5-bromo-1H-benzimidazol-1-yl)-N-[(1S)-1-phenylethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



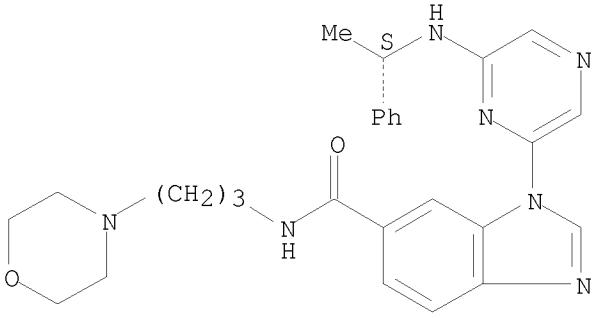
RN 629669-89-2 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, N-[3-(1H-imidazol-1-yl)propyl]-1-[6-[[(1S)-
1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



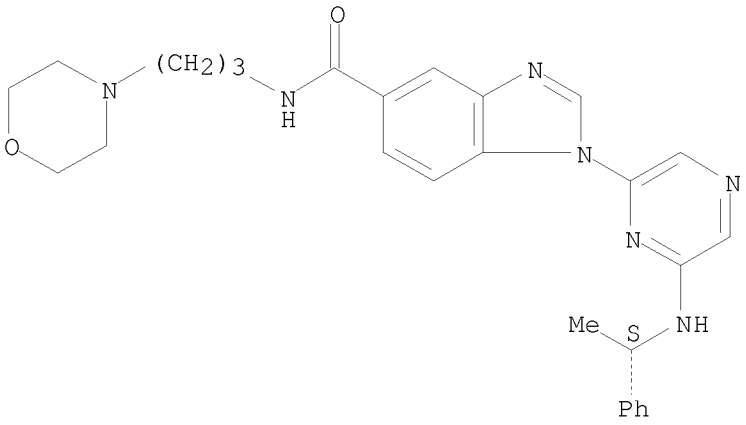
RN 629669-90-5 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, N-[3-(4-morpholinyl)propyl]-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 629669-91-6 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-[3-(4-morpholinyl)propyl]-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

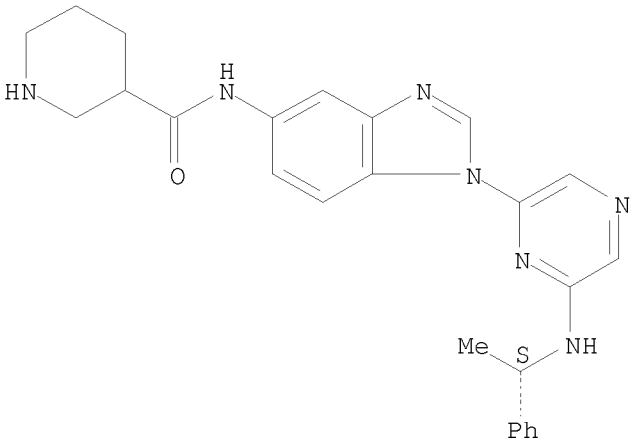
Absolute stereochemistry.



RN 629669-92-7 CAPLUS

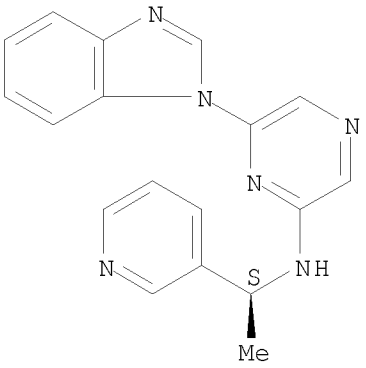
CN 3-Piperidinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



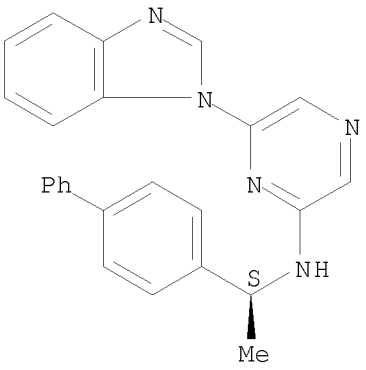
RN 629669-93-8 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-(3-pyridinyl)ethyl]- (CA INDEX NAME)

Absolute stereochemistry.



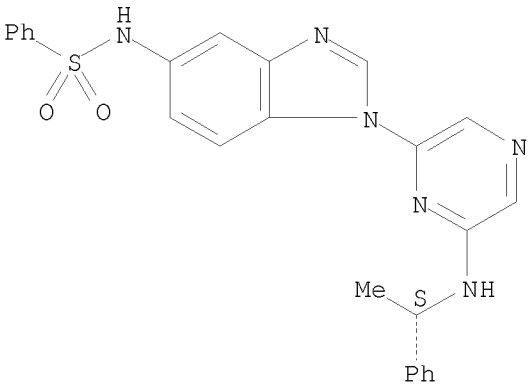
RN 629669-94-9 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1S)-1-[1,1'-biphenyl]-4-ylethyl]- (CA INDEX NAME)

Absolute stereochemistry.

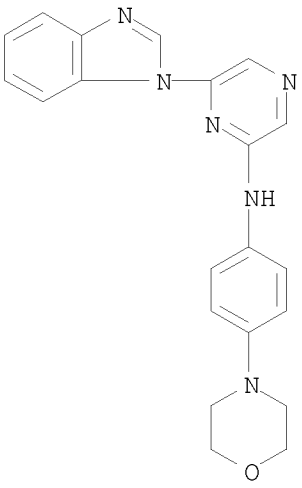


RN 629669-95-0 CAPLUS
CN Benzenesulfonamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.

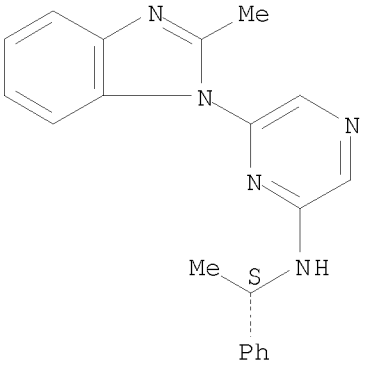


RN 629670-01-5 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[4-(4-morpholinyl)phenyl]- (CA INDEX NAME)



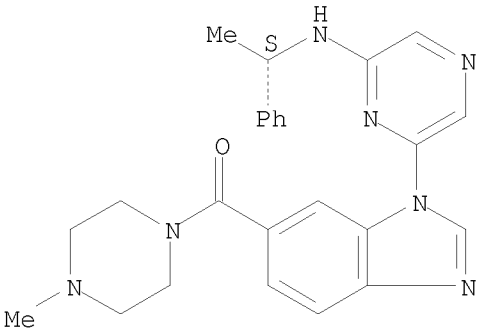
RN 629670-03-7 CAPLUS
CN 2-Pyrazinamine, 6-(2-methyl-1H-benzimidazol-1-yl)-N-[(1S)-1-phenylethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



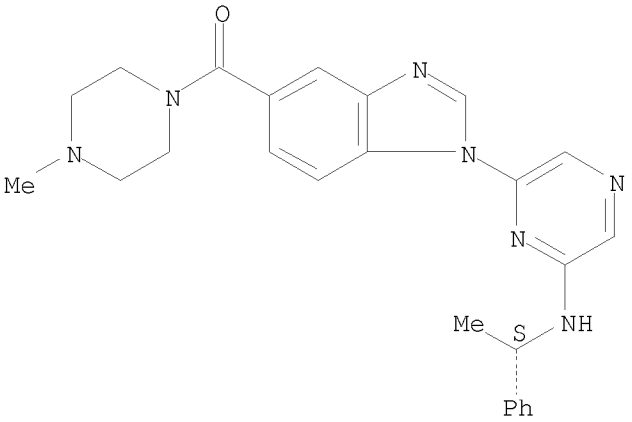
RN 629670-04-8 CAPLUS
CN Methanone, (4-methyl-1-piperazinyl)[1-[6-[[(1S)-1-phenylethyl]amino]-2-
pyrazinyl]-1H-benzimidazol-6-yl]- (CA INDEX NAME)

Absolute stereochemistry.



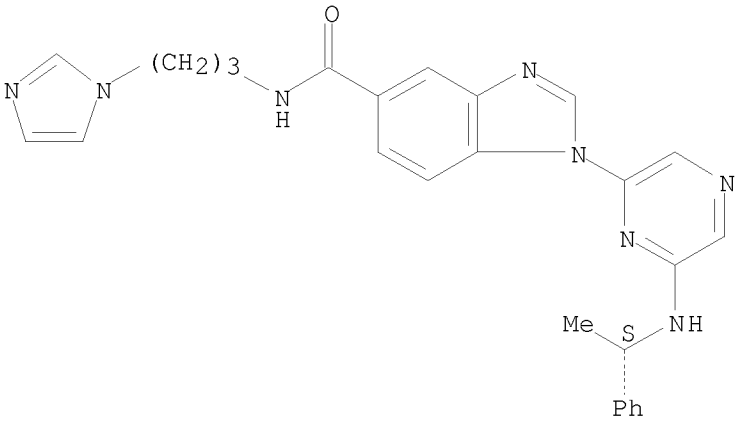
RN 629670-05-9 CAPLUS
CN Methanone, (4-methyl-1-piperazinyl)[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]- (CA INDEX NAME)

Absolute stereochemistry.



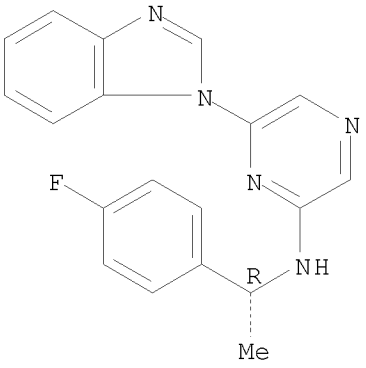
RN 629670-06-0 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-[3-(1H-imidazol-1-yl)propyl]-1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



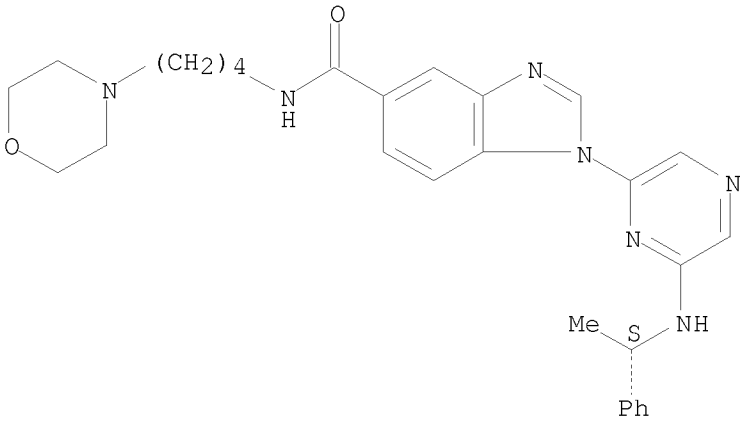
RN 629670-07-1 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1R)-1-(4-fluorophenyl)ethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



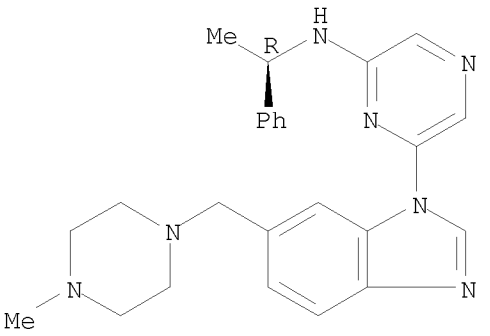
RN 629670-08-2 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, N-[4-(4-morpholinyl)butyl]-1-[6-[[(1S)-1-
phenylethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



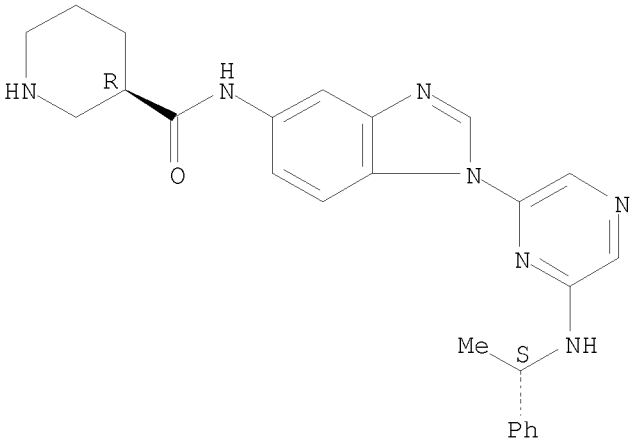
RN 629670-09-3 CAPLUS
CN 2-Pyrazinamine, 6-[6-[(4-methyl-1-piperazinyl)methyl]-1H-benzimidazol-1-yl]-N-[(1R)-1-phenylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



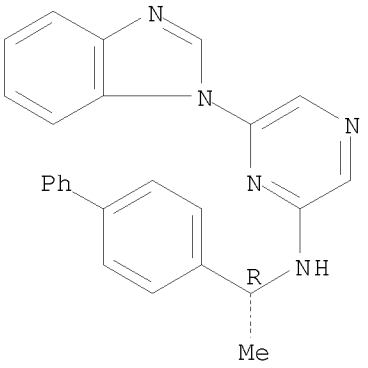
RN 629670-10-6 CAPLUS
CN 3-Piperidinecarboxamide, N-[1-[6-[[(1S)-1-phenylethyl]amino]-2-pyrazinyl]-1H-benzimidazol-5-yl]-, (3R)- (CA INDEX NAME)

Absolute stereochemistry.



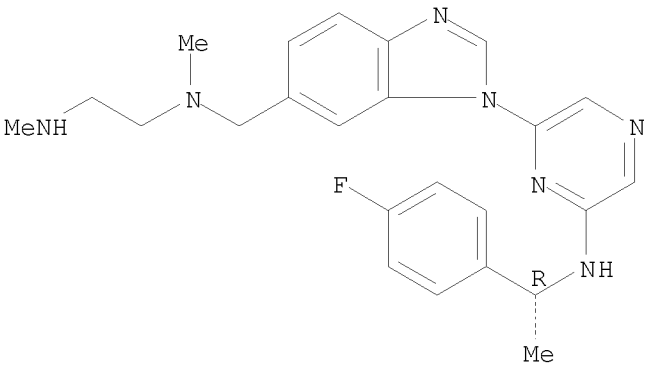
RN 629670-11-7 CAPLUS
CN 2-Pyrazinamine, 6-(1H-benzimidazol-1-yl)-N-[(1R)-1-[1,1'-biphenyl]-4-ylethyl]- (CA INDEX NAME)

Absolute stereochemistry.



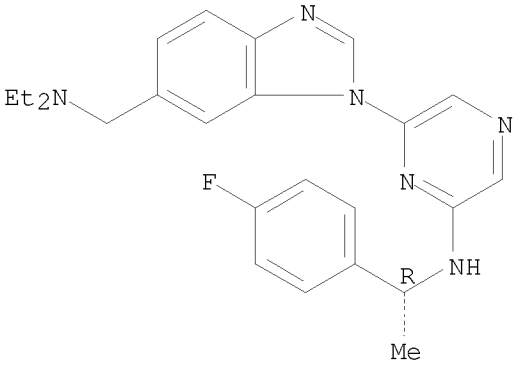
RN 629670-12-8 CAPLUS
CN 1,2-Ethanediamine, N1-[[1-[6-[[(1R)-1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]-1H-benzimidazol-6-yl]methyl]-N1,N2-dimethyl- (CA INDEX NAME)

Absolute stereochemistry.



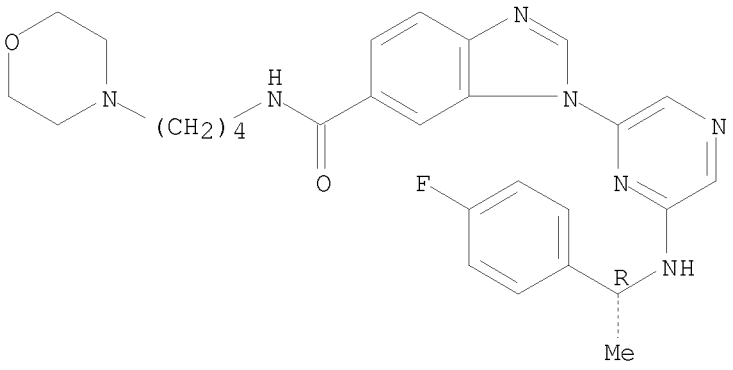
RN 629670-13-9 CAPLUS
CN 1H-Benzimidazole-6-methanamine, N,N-diethyl-1-[6-[[(1R)-1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 629670-14-0 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, 1-[6-[[(1R)-1-(4-fluorophenyl)ethyl]amino]-2-pyrazinyl]-N-[4-(4-morpholinyl)butyl]- (CA INDEX NAME)

Absolute stereochemistry.



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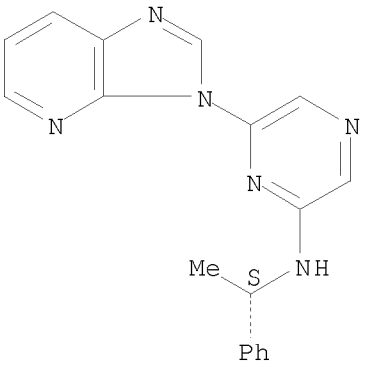
CN 2-Pyrazinamine, 6-(3H-imidazo[4,5-b]pyridin-3-yl)-N-[(1S)-1-phenylethyl]-
(CA INDEX NAME)

Absolute stereochemistry.



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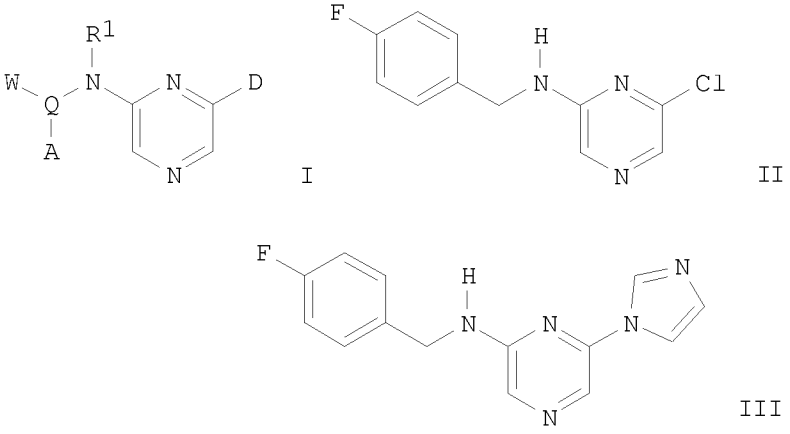

AB Title compds. I [D = (un)subsituted heterocyclic ring, e.g., benzimidazole, indazole, imidazole; R1 = H, alkyl, cycloalkyl; Q = bond CH2, alkyl; A = (un)substituted aryl, hetaryl (sic); W = H, alkyl, alkenyl, etc.] and their pharmaceutically acceptable salts were prepared For example, coupling of chloropyrazine II, e.g., prepared from 4-fluorobenzylamine and 2,6-dichloropyrazine, and imidazole afforded claimed imidazolylpyrazine III in 65% yield. In inhibition studies of the Tel-Jak3 cell line, 23-examples of compds. I exhibited a capacity to inhibit 50% of cell growth at a concentration of 50 μM. Compds. I are useful for the treatment of receptor type tyrosine kinase-related diseases.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
 NEWS 12  FEB 02  GENBANK enhanced with SET PLURALS and SET SPELLING
 NEWS 13  FEB 06  Patent sequence location (PSL) data added to USGENE
 NEWS 14  FEB 10  COMPENDEX reloaded and enhanced
 NEWS 15  FEB 11  WTEXTILES reloaded and enhanced
 NEWS 16  FEB 19  New patent-examiner citations in 300,000 CA/CAplus
                  patent records provide insights into related prior
                  art
 NEWS 17  FEB 19  Increase the precision of your patent queries -- use
                  terms from the IPC Thesaurus, Version 2009.01
 NEWS 18  FEB 23  Several formats for image display and print options
                  discontinued in USPATFULL and USPAT2
 NEWS 19  FEB 23  MEDLINE now offers more precise author group fields
                  and 2009 MeSH terms
 NEWS 20  FEB 23  TOXCENTER updates mirror those of MEDLINE - more
                  precise author group fields and 2009 MeSH terms
 NEWS 21  FEB 23  Three million new patent records blast AEROSPACE into
                  STN patent clusters
 NEWS 22  FEB 25  USGENE enhanced with patent family and legal status
                  display data from INPADOCDB
 NEWS 23  MAR 06  INPADOCDB and INPAFAMDB enhanced with new display
                  formats
 NEWS 24  MAR 11  EPFULL backfile enhanced with additional full-text
                  applications and grants
 NEWS 25  MAR 11  ESBIOBASE reloaded and enhanced
 NEWS 26  MAR 20  CAS databases on STN enhanced with new super role
                  for nanomaterial substances

 NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
              AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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FILE 'HOME' ENTERED AT 14:08:56 ON 21 MAR 2009

=> fil reg
COST IN U.S. DOLLARS                                  SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.22       0.22

FILE 'REGISTRY' ENTERED AT 14:09:07 ON 21 MAR 2009
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10581412

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STRUCTURE FILE UPDATES: 20 MAR 2009 HIGHEST RN 1124448-78-7
DICTIONARY FILE UPDATES: 20 MAR 2009 HIGHEST RN 1124448-78-7

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http://www.cas.org/support/stngen/stndoc/properties.html

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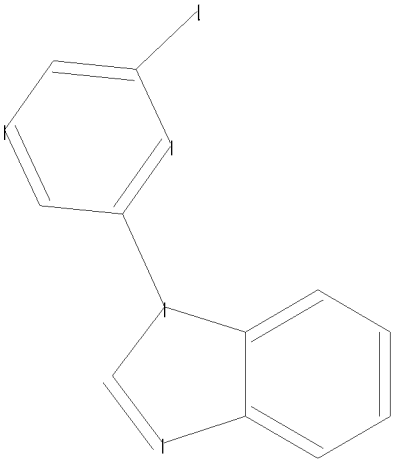

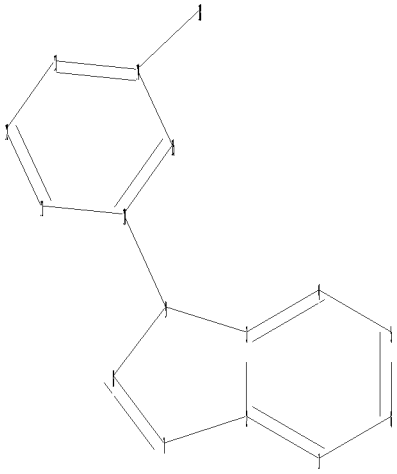

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
ring/chain nodes :
18
chain bonds :
9-10 14-18
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 10-11 10-15 11-12 12-13 13-14
 14-15
exact/norm bonds :
2-7 3-9 7-8 8-9 9-10
exact bonds :
14-18
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15
isolated ring systems :
containing 1 : 10 :

G1:C,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 18:Atom

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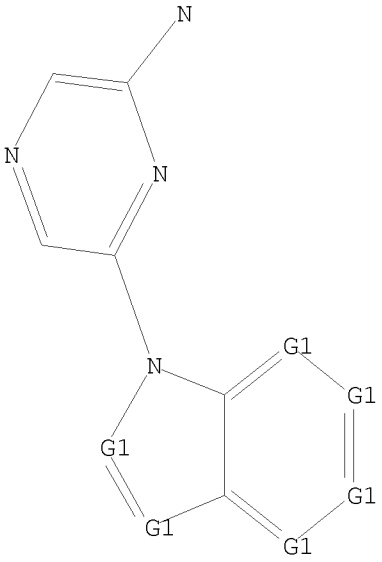
L1 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 183 TO ITERATE

100.0% PROCESSED 183 ITERATIONS 19 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2849 TO 4471
PROJECTED ANSWERS: 119 TO 641

L2 19 SEA SSS SAM L1

10581412

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DELETE L1-L2? (Y)/N:y

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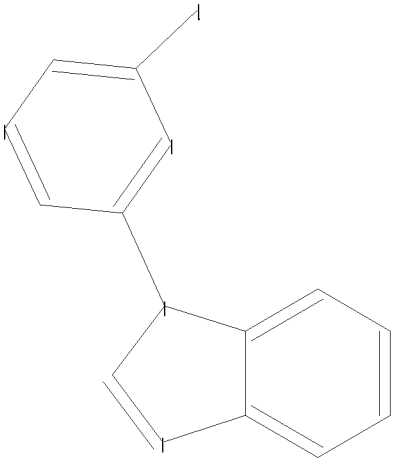

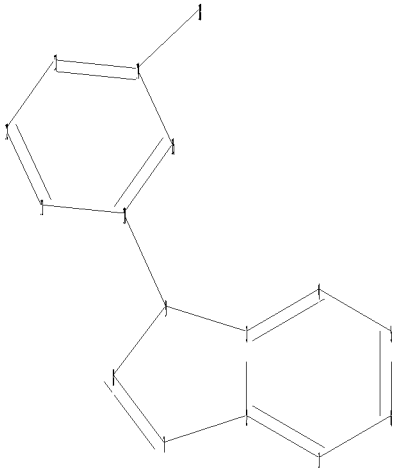

ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
ring/chain nodes :
18
chain bonds :
9-10 14-18
ring bonds :
1-2 1-6 2-3 2-7 3-4 3-9 4-5 5-6 7-8 8-9 10-11 10-15 11-12 12-13 13-14
14-15
exact/norm bonds :
2-7 3-9 7-8 8-9 9-10
exact bonds :
14-18
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15
isolated ring systems :
containing 1 : 10 :

G1:C,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
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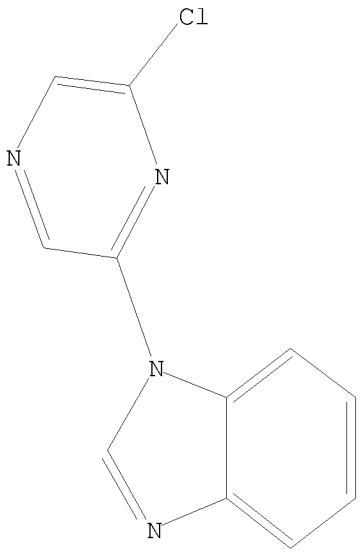
L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



G1 C,N

Structure attributes must be viewed using STN Express query preparation.

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=> s l1 sam
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SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:            0 TO        0
PROJECTED ANSWERS:               0 TO        0

L2            0 SEA SSS SAM L1

=> s l1 ful
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FULL SCREEN SEARCH COMPLETED -       54 TO ITERATE

100.0% PROCESSED       54 ITERATIONS                               10 ANSWERS
SEARCH TIME: 00.00.01

L3           10 SEA SSS FUL L1

=> fil cpal
'CPAL' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'REGISTRY'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available.  If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
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                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     186.36     186.58

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FILE COVERS 1907 - 21 Mar 2009  VOL 150 ISS 13
FILE LAST UPDATED: 20 Mar 2009  (20090320/ED)

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This file contains CAS Registry Numbers for easy and accurate
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=> s l3
L4           3 L3

=> d l4 ibib hitstr abs 1-3
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L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:638866 CAPLUS
DOCUMENT NUMBER: 143:153403
TITLE: Preparation of benzimidazolylazines and related compounds as selective JAK3 kinase inhibitors
INVENTOR(S): Styles, Michelle Leanne; Zeng, Jun; Treutlein, Herbert Rudolf; Wilks, Andrew Frederick; Kling, Marcel Robert; Bu, Xianyong; Burns, Christopher John
PATENT ASSIGNEE(S): Cytopia Research Pty. Ltd., Australia
SOURCE: PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005066156	A1	20050721	WO 2005-AU22		20050112
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2005203919	A1	20050721	AU 2005-203919		20050112
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CN 1906190	A	20070131	CN 2005-80001563		20050112
BR 2005006817	A	20070529	BR 2005-6817		20050112
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JP 2007517807	T	20070705	JP 2006-548036		20050112
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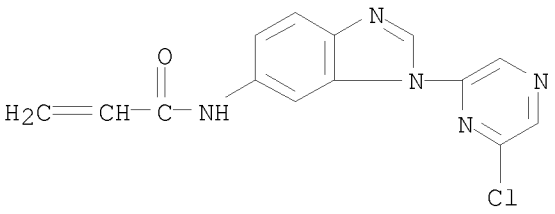
			GB 2006-12225	A3	20050112
			WO 2005-AU22	W	20050112

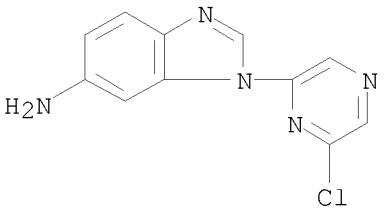
OTHER SOURCE(S): CASREACT 143:153403; MARPAT 143:153403
IT 860300-93-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of benzimidazolylazines and related compds. as
selective JAK3 kinase inhibitors)
RN 860300-93-2 CAPLUS

CN 2-Propenamide, N-[1-(6-chloro-2-pyrazinyl)-1H-benzimidazol-6-yl]- (CA INDEX NAME)



IT 860301-24-2P 860301-25-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of benzimidazolylazines and related compds. as selective JAK3 kinase inhibitors)

RN 860301-24-2 CAPLUS
CN 1H-Benzimidazol-6-amine, 1-(6-chloro-2-pyrazinyl)- (CA INDEX NAME)



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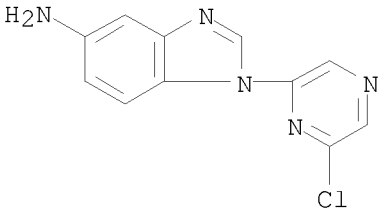

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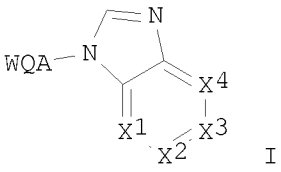


I

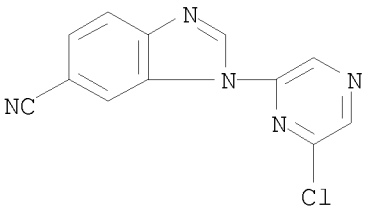
AB Title compds. [I; 1 of X1-X4 = CZ, the others = CY; or 1 of X1-X4 = N, 1 = CZ, the others = CY; A = (substituted) pyridyl, pyrazinyl, pyrimidyl, triazinyl, pyridazinyl; Q = bond, halo, alkyl, O, S, SO, SO2, CO, CS; W = H, alkyl, aryl, heteroaryl, cycloalkyl, alkylaryl, alkylheteroaryl, cycloalkyl, (substituted) amino, etc.; Y = H, halo, cyano, NO2, CF3, OH, alkyl, aminoalkyl, alkoxyalkyl, alkylheteroaryl, alkylthio, etc.; Z = (CH2)nCOCR9:CHR10, (CH2)nNR8COC.tplbond.CR9, etc.; n = 0-4; R8 = H, alkyl; R9, R10 = H, alkyl, alkylamino, alkylheteroaryl, etc.; R9R10 = atoms to form a 5-8 membered ring], were prepared Thus, a mixture of 1-[6-(tert-butylamino)pyrazin-2-yl]-1H-benzimidazol-5-amine (preparation given), Et3N, EDAC.HCl, 4-(1-pyrrolidino)pyridine, and acrylic acid were stirred together for 3 days in CH2Cl2 to give N-[1-[6-(tert-butylamino)pyrazin-2-yl]-1H-benzimidazol-5-yl]acrylamide. The latter gave ≥50% inhibition of JAK3 at 20 μM.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

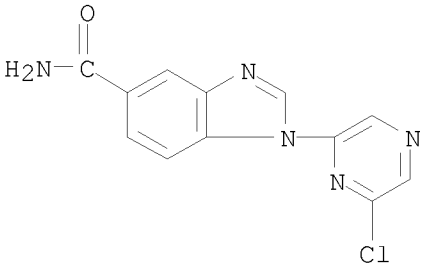
L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:523444 CAPLUS
DOCUMENT NUMBER: 143:60004
TITLE: Preparation of pyrazine derivatives as kinase inhibitors
INVENTOR(S): Burns, Christopher John; Wilks, Andrew Frederick; Bu, Xianyong
PATENT ASSIGNEE(S): Cytopia Research Pty Ltd., Australia
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005054230	A1	20050616	WO 2004-AU1690		20041203
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2004294355	A1	20050616	AU 2004-294355		20041203
CA 2545425	A1	20050616	CA 2004-2545425		20041203
EP 1689739	A1	20060816	EP 2004-801112		20041203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS					
GB 2423083	A	20060816	GB 2006-11894		20041203
GB 2423083	B	20070711			
CN 1878767	A	20061213	CN 2004-80033482		20041203
BR 2004017345	A	20070313	BR 2004-17345		20041203
JP 2007513094	T	20070524	JP 2006-541751		20041203
IN 2006KN00616	A	20070727	IN 2006-KN616		20060316
MX 2006005983	A	20060907	MX 2006-5983		20060525
US 20070099935	A1	20070503	US 2006-581412		20060601
KR 2006126981	A	20061211	KR 2006-710931		20060602
PRIORITY APPLN. INFO.:			AU 2003-906686	A	20031203
			AU 2004-902060	A	20040420
			WO 2004-AU1690	W	20041203

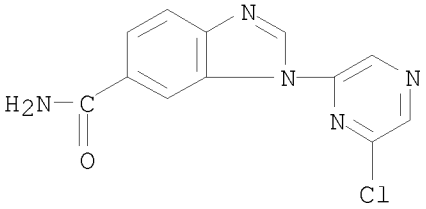
OTHER SOURCE(S): CASREACT 143:60004; MARPAT 143:60004
IT 853888-36-5P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of pyrazine derivs. as kinase inhibitors)
RN 853888-36-5 CAPLUS
CN 1H-Benzimidazole-6-carbonitrile, 1-(6-chloro-2-pyrazinyl)- (CA INDEX NAME)



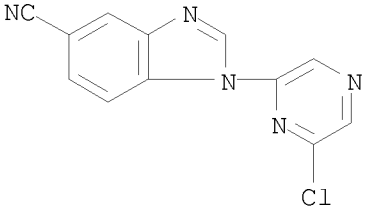
IT 853888-52-5P 853888-53-6P 853888-54-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of pyrazine derivs. as kinase inhibitors)
RN 853888-52-5 CAPLUS
CN 1H-Benzimidazole-5-carboxamide, 1-(6-chloro-2-pyrazinyl)- (CA INDEX NAME)



RN 853888-53-6 CAPLUS
CN 1H-Benzimidazole-6-carboxamide, 1-(6-chloro-2-pyrazinyl)- (CA INDEX NAME)



RN 853888-54-7 CAPLUS
CN 1H-Benzimidazole-5-carbonitrile, 1-(6-chloro-2-pyrazinyl)- (CA INDEX NAME)



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

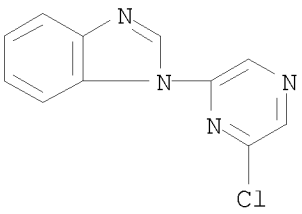
AB Title compds. I [A = (un)substituted-aryl, -heteroaryl; W, X, Y and Z = (un)substituted carbon, or one of W, X, Y and Z is nitrogen and the rest (un)substituted carbon; Q = bond, CH2, alkyl; R1 = H, alkyl, cycloalkyl, etc.; R2 = H, (un)substituted-alkyl, -alkenyl, etc.; R3 = 0-2 substituents selected from H, alkyl, NR5R6; R4 independently = H, halo, alkyl, etc.; R5 and R6 independently = H, alkyl] and their pharmaceutically acceptable salts, are prepared and disclosed as kinase inhibitors. Thus, e.g., II was prepared by coupling of (6-chloro-pyrazin-2yl)-(1-benzyl)-amine with benzimidazole. The activity of I was evaluated and it was revealed that selected compds. of the invention displayed an inhibition capacity of 50% or greater at a concentration of 20 μM. I as inhibitors of kinases should prove useful in the treatment of diseases such as, but not limited to, rheumatic, viral and cardiovascular diseases. Pharmaceutical compns. comprising I are disclosed.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:41279 CAPLUS
DOCUMENT NUMBER: 140:94066
TITLE: Preparation of 2,6-disubstituted pyrazines that inhibit/modulate cyclin dependent kinases
INVENTOR(S): Woolford, Alison Jo-Anne; Berdini, Valerio; Oreilly, Marc; Padova, Alessandro; Saxty, Gordon; Wyatt, Paul Graham
PATENT ASSIGNEE(S): Astex Technology Limited, UK
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

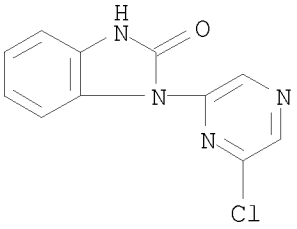
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004004730	A2	20040115	WO 2003-GB2905	20030704
WO 2004004730	A3	20040429		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003242860	A1	20040123	AU 2003-242860	20030704
PRIORITY APPLN. INFO.:			GB 2002-15775 A	20020706
			WO 2003-GB2905 W	20030704

OTHER SOURCE(S): MARPAT 140:94066
IT 380639-51-0P, 1-(6-Chloropyrazin-2-yl)-1H-benzimidazole
642459-08-3P, 1-(6-Chloropyrazin-2-yl)-1,3-dihydrobenzimidazol-2-one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2,6-disubstituted pyrazines that inhibit/modulate cyclin dependent kinases)
RN 380639-51-0 CAPLUS
CN 1H-Benzimidazole, 1-(6-chloro-2-pyrazinyl)- (CA INDEX NAME)



RN 642459-08-3 CAPLUS
CN 2H-Benzimidazol-2-one, 1-(6-chloro-2-pyrazinyl)-1,3-dihydro- (CA INDEX

NAME)



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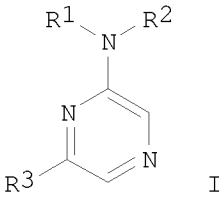

I

AB Title compds. I [R1 = H, cycloalkyl, cycloalkenyl, phenyl-alkyl, etc.; R2 = (hetero)aryl, cycloalkyl, cycloalkenyl, etc.; R3 = halo, CN, N-linked monocyclic N-containing heterocycle, etc.] are prepared For instance, 2,6-dichloropyrazine is reacted with cyclopentylamine (THF, Et3N, 50°, 1 day) to give 2-chloro-6-(cyclopentylamino)pyrazine (II). II has IC50 = 52 μM for CDK2 kinase. I are useful in the prophylaxis or treatment of a diseases mediated by a cyclin dependent kinase.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT